

IS THE BIBLE TRUE?

Bishop Colenso

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IS THE BIBLE TRUE?

Pt. 2

FAMILIAR DIALOGUES

BETWEEN

JAMES WHITE AND EDWARD OWEN,

CONCERNING

BISHOP COLENSO
AND THE PENTATEUCH,

AND

THE TESTIMONY OF GEOLOGY TO
THE BIBLE.

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BISHOP COLENSO AND THE PENTATEUCH.

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IS THE BIBLE TRUE?

PART II.

JAMES WHITE: EDWARD OWEN.

I.—THE APPEAL TO GERMAN CRITICISM.

Owen. Good morning, friend White; I am glad to have fallen in with you. I have wanted, for several days past, to have a little talk with you about Bishop Colenso's book. Have you seen it?

White. Yes; I met with it the other day, and turned it over, and noted down most of its leading points in my pocket-book.

Owen. Well, and what did you think of it?

White. I thought it an exceedingly weak affair. It seemed to me to be the work of a well-meaning man, who had given very little time to the study of theology; and who, when circumstances obliged him to take it up, went to a wrong quarter for information, and so got himself completely perplexed. The book, I fancy, will be utterly torn to pieces before many months are over, and will only be remembered as having wrought the downfall of its author.

Owen. Well, I am rather glad to hear you say so; for, in truth, it had somewhat startled me. You know that, since our conversations on the *Essays and Reviews*, I have only gradually recovered, in some degree, my footing; but this book, insisting so strongly on the absolute untruth of all the first five books of the Bible, not only appalled, but did, in some measure, shake me. I saw that either its writer was altogether in error, or else the Bible must be given up. And, as I said in the first conversation we had, if we have no Bible, to be relied upon and believed, I do not see how we can have any Christianity.

White. You were not deceived, then, by the bishop's assurances, that Christianity could do very well without the Bible?

Owen. Why, no; I had long since made up my mind, that "if we have not a Christianity resting on written documents, we have none at all." The idea of "a message from God"—as Bishop Colenso deems the Bible—large portions of which are absolutely *untrue*, seems to me to be profane as well as absurd. That God's Holy Spirit should have inspired holy men of old to write a parcel of incredible fables, surely is a most preposterous as well as a most irreverent thought.

White. On that point we are quite agreed. But what, then, has perplexed you, in the bishop's volume?

Owen. Oh! you know that he has selected about a dozen cases, in the five books of Moses, to which, he says, it is impossible for any man, seriously considering the statements made, to give credence. He therefore concludes that these books are "unhistoric;" by which he means, untrue;

and that they could not have been written by Moses, or by any other person living at the time. Now he has not, I think, made out his case in all respects; but to some of the objections he has taken, I do not see what answers can be given. And therefore I said that I should like to talk with you on some of these points.

White. Well, I shall be glad if I can clear up any difficult passage. I myself saw little, in turning over the book, which seemed likely to give much trouble. What chiefly struck me, on a hasty reading, was, the absurd way in which the poor bishop, when he got into perplexities, sought to get out of them. He sent, forsooth, for a lot of German books; as if a consultation with a number of infidels could have any tendency to restore his faith in Christianity!

Owen. But is not this the course generally taken, now-a-days? I remember that, on turning over the great *Dictionary of the Bible*, which was published last year, I found constant references, in most of the principal articles, to German critics and commentators.

White. Oh, yes! I am well aware that, with most of the younger men of the present day, this is quite the fashion; but I am not in the habit of considering that fashion decides the right or wrong of any question. Twenty years ago a bias towards Popery was the prevailing fashion at Oxford; now the opposite extreme of Rationalism is in the ascendant: but I do not believe that Truth was in either of these hostile camps. And when men now turn, in any theological difficulty, to Germany for a decision, I merely ask, Why they do so?

Owen. Surely it must be because Germany

possesses greater scholars and more competent theologians than our own country can show.

White. If this be so, there is something very strange in it. I do not find a like inferiority admitted in any other department of science. I never hear our lawyers or our physicians referring to the superior knowledge of the men of Germany. Our statesmen and politicians, I fancy, deem the Germans rather behind than before us in political wisdom. As to literature, I am told, that for five works which England borrows from Germany, Germany borrows from England at least fifty. Nowhere, therefore, do I meet with this alleged German superiority, except in theological matters. And how can I help suspecting that there is some mistake here, and that this supposed or assumed supremacy, in all questions of theology, is, after all, mere pretension, resting upon nothing?

Owen. But surely this can hardly be. Looking at the high mental rank of the men in England who have agreed to make Germany the arbiter of all theological questions, you can hardly attribute to them the folly of submitting to an incompetent authority. Surely, if they turn in every difficulty to the doctors of Germany, it must be because they have tested their quality, and found them practically the superiors of all the theological students in the world at the present day.

White. I admit the reasonableness of such a presumption; but I cannot shut my eyes to certain other facts. "Do men gather grapes of thorns, or figs of thistles?" If a nation produces, beyond all other nations, great theologians, it must be because that nation is pre-eminently a religious nation. An inland empire seldom produces a fine

race of sailors, nor should we expect a Laplander to be greatly skilled in the production of wine. Are the people of Germany, then, far above the people of England in their love for religion? Did you ever hear any one assert such a thing?

Owen. No; I do not remember that I have. In fact, it occurs to me that R—, who was resident for some years in Germany on railway business, told me that he thought that the people generally had very little care for religion. On Sundays, they got over a service at church as quickly as they could in the forenoon, and then devoted the rest of the day to pleasure—in the parks and gardens, in the concert-room and theatre.

White. I have heard the same from two or three people. In fact, Mr. Palmer, in his *Treatise on the Church*, does not hesitate to say, that "Lutheranism and Calvinism, as religious systems, seem to have nearly perished in the countries where they arose." (Vol. i. p. 389.) One test of this is found in the little interest they take in the cause of missions. The Protestants of Great Britain and Ireland raise, I believe, year by year, about five hundred thousand pounds for the propagation of Christianity among the heathen. All the Protestants of Germany—more numerous, I think, than the Protestants of these islands—do not raise, I have heard, so much as fifty thousand.

Owen. But what has this to do with the question? Will not Bishop Colenso tell you that here are a body of learned men—Ewald and Havernick, and Kurtz and Kalisch,—and that they have, in fact, produced a body of Biblical

criticism for which England can show no counterpart?

White. I shall not question the fact, that a mass of learned books have been produced; but the real question is, *their value*. And that question cannot easily be decided, even by learned men in England. Half-a-dozen scholars may say, "We value Ewald's works very highly;" and half-a-dozen other scholars may say, "We deem them great rubbish." And seeing that neither I nor you, nor any one else, can decide this point, I adduce the other facts as bearing upon the main question. I say, first, that in nothing but Biblical criticism does England ever dream of sitting at Germany's feet; and, secondly, that it must be a very singular and anomalous circumstance, if a people who are less religious than the English should have produced a higher class of theological writings. Such a thing, if it could be, would directly contradict the rule that "men do not gather grapes of thorns, or figs of thistles."

Owen. Yet, after all, you have not disposed of the main fact. There the books are—a proof of German industry, at least; and if they are not valuable, can you explain how they ever found their way into the high esteem of many English scholars?

White. I might reply, generally, that they have owed their success mainly to their proud assumption. "In this wicked world," says Goldsmith, "respect is paid, where respect is claimed." But there is another and an especial reason to be adduced for the favour with which Ewald and his fellows have been received among many English scholars. They offer something *new*; something

which England has never, or but rarely produced; *i.e.* learned, painstaking criticism of a book which the critic still holds to be human and untrue. Of this we have little in England. Our infidels reject the Bible, scoff at it, and then leave it. But German unbelievers first dismiss the idea that the Bible is a Divine Revelation; and then, having lowered it to the rank of Homer and Herodotus, they proceed, dealing with it as a curious old document, to spend upon it long years of critical labour. And thus a sort of Biblical literature has sprung up in Germany, like which, I grant, we have nothing in England. And it is certainly true, that if a man desires, as a mere Deist, to spend time on the study of the Scriptures, without at all believing in them, it is to Germany that he must go for helps. But to a Christian, these books must necessarily prove most nauseous and offensive; because they freely and rudely handle, as human, that which he believes to be Divine.

Owen. But do you not err in classing together as infidel or semi-infidel all the German Biblical critics? Have you forgotten that Bishop Colenso found and studied German writers on both sides—defenders as well as assailants of the Pentateuch?

White. I have not forgotten this circumstance; but it does not much affect my opinion. Speaking of Ewald and his followers, I wondered that Bishop Colenso should expect to find his doubts quieted, and his mind set at rest, by consulting such writers as these. As to the orthodox commentators of Germany, who were also obtained and studied by the bishop, my only remark would be, that he might have found far more satisfactory solutions of his doubts in English commentators than any

which he has cited from Havernick or Hengstenberg. Take his very first "difficulty"—the family of Judah. It is poorly and inefficiently handled by Kurtz and Havernick. But had the bishop turned to English critics, he would have found far more satisfactory answers in Kennicott, Horsley, and others, who wrote towards the end of the last century. And so throughout the whole discussion. With the single exception of Scott, Bishop Colenso scarcely ever refers to an English commentator. He consults German critics on both sides of every question, and decides as their negative or affirmative proof seems to preponderate. Now I am ready to maintain that in this he is clearly wrong. I readily admit that the German defenders of the Pentateuch, who are quoted by him, make a very poor figure. But this is just what I should have expected. To my mind it decides nothing; for I do not believe that the Germans have sole possession of the key of Biblical truth. As in the first instance cited by Bishop Colenso, so in most of the others also, the German defenders fail, but we in England can find better arguments than the Germans have used. And hence I say, that in thus referring every question to the decision of the German critics, Bishop Colenso has done wrong. He has started with a great practical error, and it is no wonder that he went astray.

Owen. Well, this, after all, is only your view of the case: we shall see how it is borne out by the facts, as we proceed with the inquiry. I have, however, heard another remark made, to which you have not referred—namely, that there is more freedom of inquiry in Germany than in England:

that in England our clergy and university-professors are all tied by pecuniary considerations, so as to be compelled to stand by the infallibility of Scripture; while in Germany men have more liberty, and can pursue their historical and philological inquiries with fuller liberty, and less fear of personal loss. I have heard this reason described as a very solid one, for deeming the German critics preferable to those of England.

White. I have heard it also, but I think it carries little weight. Let us look at the real facts. It is not alleged that the German clergy are destitute of any fixed standards of faith; or that the university-professors in that country are bound by no obligations. In outward profession there is little difference in these respects between England and Germany. But what is asserted is, that irreligion, indifference and unbelief, have become so nearly universal, that the ancient laws have fallen into neglect and desuetude, and every theologian "does that which is right in his own eyes." And this, it is assumed, is a peculiarly advantageous state of things for the free study of the sacred writings.

Owen. Yes; I know that this is the position taken; do you quarrel with it?

White. Certainly I do. I remark, first, that it is a most transparent fallacy to imagine that in Germany, or in any other country, you have a people in an impartial and unbiassed state of mind. The fact is quite otherwise. The morals of the Bible are pure and elevated, and in most countries the bulk of the people refuse to submit to them. The demands of the Bible, too, on the proud and arrogant, are intolerable. On these, and on other grounds, there are many men who rejoice when they

hear that a vehement attack is made on the Bible. But to come to the more immediate question; Germany has a large number of schools, containing a multitude of men; industrious, speculative, and eager for distinction. In the prevalent temper of the nation, little was to be gained by a mere defence of orthodoxy; such labours would produce no novelty, no distinction, no popularity or fame. The minds of the ambitious were thus biassed in an opposite direction. One scholar said, "I will show that Genesis, instead of being the work of Moses, is a combination of two old legends; one by "the Elohist," the other by "the Jehovah." Another undertook a like task with the book of Isaiah. The idea of a Divine Revelation was utterly cast aside; and crowds of scholars eagerly embraced the novel idea, that the Hebrew Scriptures were nothing but a parcel of old legends, which had come down to us somehow; and of which we were at liberty to believe what we pleased, and interpret how we liked. And this is the sort of study of the Scriptures which has been going on in Germany. To describe this class of critics as ingenuous, impartial inquirers after truth, is to indulge in dreams and fictions. Their motives, their bias in favour of a reckless, licentious indulgence in speculation, are quite as evident, and quite as strong, as any that can be attributed to English defenders of the Scriptures. And as to yielding them a preference, as the more impartial, the more ingenuous of the two, it would be utterly unjust.

Owen. Well, this is a matter which I must reflect upon. At present, then, we have got no further than this,—that you question the propriety of the bishop's course, in resting so exclusively

the whole case on the judgment of the German commentators.

White. Yes. I remark,—1st. That as I do not find Englishmen bowing down to Germans in any other thing—in law, in medicine, in science, in politics, or in literature; it seems to me to be strange and unnatural that they should make German critics the arbiters of Biblical criticism. And, 2dly, I add, that this anomaly might perhaps disappear, if it could be urged that the Germans were the most religious of all people. But that, as the very contrary is known to be the case, the absurdity becomes quite startling. Who would act thus in any other case? There may be a nation nearly destitute of musical taste and knowledge; would Italy refer a question connected with music to its decision? There might be another wholly destitute of sea-ports and shipping; would England and America refer a point of maritime law to the adjudication of such a people?

Owen. Ah! but you forget that it is urged that the less bias there is the better; and that indifferentism leaves German critics free to decide every question on its own merits.

White. I utterly deny the existence of any such neutrality. No one of these writers ever sat down to the study of Holy Scripture with a mind absolutely free from purpose or bias. In most cases fame, distinction, was palpably the object; and bold and novel speculation the means employed. And I entirely reject the idea that this state of mind deserves more respect, and should receive more deference, than belongs to the lucubrations of a Horsley, an Alford, or a M'Caul, in our own land.

DIALOGUE II.

THE FIRST OBJECTION.

Owen. Welcome! We shall now, I suppose, go into the actual contents of Bishop Colenso's book; into the various objections he brings against the "credibility" of the story told in Genesis and Exodus. Our first conversation was occupied in considering the propriety of gathering our views of these matters from the German critics.

White. Yes; and I shall often recur to this point as we go along. I urged the absurdity of supposing that the Germans must be our best teachers; and I shall have to insist upon it repeatedly, as we proceed with the inquiry, that, in point of fact, better and more solid solutions of Bishop Colenso's difficulties might have been found in English authors than any which he has imported from Germany. But now, do you begin.

Owen. Well, what do you say to his second chapter, which propounds his first objection, that Hezron and Hamul are named among the sixty-six or seventy which "went down to Egypt with Jacob;" whereas, they could not at that time have been born?

White. I say, first of all, that if the facts were as Bishop Colenso states them, the objection would still be a petty and trivial one. These family lists, given in the Bible, in Gen. xlvi., in 1 Chron. i.-ix., in Matt. i., and in Luke iii., must be taken

to be copies of the documents carefully preserved by the Hebrew priests and scribes. Such a document, doubtless, had been handed down from Jacob's days to the days of Moses, and he copied it in his history. Whether it was written by Joseph, or by whom, matters little. If written ten or twenty years after Jacob's family came into Egypt, it would be very natural for the writer, after noting that two of Judah's children died in Canaan, to add the names of the two grandsons who came to fill their place. And who, but a man who was determined to find fault, would ever dream of stigmatising, on this account, the whole list as false and incredible? This would be the answer, I repeat, which I should make, if Bishop Colenso's statement had been a true and incontrovertible one. But I have no occasion to use it; for a very little examination will show you that the bishop's whole argument is raised upon the sand.

Owen. How do you make that out?

White. Read his main statement, as you find it in his own words, at page 18.

Owen. (*Reads.*) "Now Judah was forty-two years old, according to the story, when he went down with Jacob into Egypt."

White. Stop there;—For, as I do not believe that Judah was forty-two years old when he went down to Egypt, I must ask you, how the bishop makes this out?

Owen. He appends a note, in which he first shows that Joseph was about thirty-nine years old when his brethren found him in Egypt.

White. That I believe.

Owen. He then adds,—"Judah was about

three years older than Joseph ; for Judah was born in the *fourth* year of Jacob's double marriage (Gen. xxix. 35), and Joseph in the *seventh* (Gen. xxx. 24-26 ; xxxi. 41). Hence, Judah was forty-two years old when Jacob went down to Egypt."

White. And this is what a Cambridge Wrangler calls proving a thing ! Now let us look at his proofs. He says that "Judah was born in the fourth year of Jacob's double marriage, (Gen. xxix. 35)." Please to look at that passage.

Owen. Here it is.

White. Does it say one word about Judah's being born in the fourth year ?

Owen. I do not see that it does ; but Judah was Leah's fourth son.

White. Well, but the wives of the patriarchs suckled their children (see Gen. xxi. 7). Is it usual for mothers, under those circumstances, to have children every year ?

Owen. No, certainly not.

White. It is therefore more likely that Judah was born in the eighth year after marriage, is it not ?

Owen. I should say so.

White. So much, then, for Bishop Colenso's first fact. Now, go on. His next text is Gen. xxx. 24-26, I think : please to turn to it.

Owen. Here it is.

White. Well, Bishop Colenso says that text shows that Joseph was born in the seventh year after the marriage. Does Gen. xxx. 24-26, say one word about the seventh year ?

Owen. I do not see that it does ; but the bishop gives also another text, Gen. xxxi. 41.

White. Read it.

Owen. "Thus have I been twenty years in thy house: I served thee fourteen years for thy two daughters, and six years for thy cattle; and thou hast changed my wages ten times."

White. Well, does that say anything about Joseph's birth?

Owen. No, I do not see that it does. But perhaps it is calculated thus:—If Jacob spent twenty years in Padan-aram, and was not married till the eighth, and made a bargain as to his services (on the birth of Joseph) six years before the end of the twentieth, then Joseph must have born in the fourteenth year, or the seventh from the marriage.

White. Yes, I know that here we have a key to the whole blunder: for a blunder it certainly is. This supposition that Jacob abode in Padan-aram only twenty years has been hastily taken up by many commentators, and has passed from one to another without examination, just as it passes to Bishop Colenso. Yet it leads to all manner of anomalies and contradictions. For instance:—

1. If Jacob stayed only twenty years in Padan-aram, he must have been seventy-seven years old when he fled from the wrath of his brother. Now, the usual age of full manhood and marriage with the patriarchs was forty. Isaac married at forty; Esau married at forty: why, then, should Isaac and Rebekah, knowing that in Jacob's seed "should all the nations of the earth be blessed,"—why should they have left him for thirty-seven years after his brother's marriage, without any instructions as to a wife? Or why should Jacob himself, not of a cold temperament, have so remained, till old age drew near?

2. Again, between Rebekah's disgust at the daughters of Heth (Gen. xxvi. 35), and the expression of that disgust (Gen. xxvii. 46), there is an evident connexion. Who, on reading those chapters, would dream that there was a period of thirty-seven years between them?

3. If Jacob was 77 when he fled to Padan-aram, then the year of the world was 2245. But we are next told that when Esau saw that his father had sent Jacob to Padan-aram for a wife, "then went Esau to Ishmael," and took one of his daughters to wife. But here we encounter a positive contradiction; for Ishmael, in A. M. 2245, *had been dead fourteen years*.

4. If Jacob fled to Padan-aram when he was 77, and was not married till he was 84, and had his first son, Reuben, when he was 85, and his eleventh, Joseph, when he was 90 or 91, then twelve out of his thirteen children are all crowded into a period of five or six years. Leah, too, first has four sons at four successive births, then ceases bearing, and after her maid Zilpah has had two sons, Leah begins again, and bears two more sons and Dinah; and all these seven births, with a considerable pause, are to be included in this same six years!

5. Reuben goes out into the field, and finds mandrakes, and brings them to his mother, before the last three births. But Reuben, according to this compressed plan, was at this time only an infant of four or five years old!

All these difficulties struck a learned Hebraist, Mr. Skinner, about a century ago. He pointed out the single error which led to them all; namely, a hasty supposition that the two twenty years,

alluded to by Jacob in his expostulation with Laban, were one and the same period, instead of two. He showed that the Hebrew would entirely bear the meaning of two periods, not one:—namely, “these twenty years” in which Jacob served Laban, and the other twenty years in which he was enriching himself. In fact, how Jacob, while merely a servant, should, in five or six years, have got exceedingly rich (Gen. xxx. 43), is itself a difficulty. But the whole of these vanish in a moment, as soon as the story is read in its plain, ordinary sense.

Owen. What do you call its plain, ordinary, sense?

White. Why, in its regular order. Thus:—Esau and Jacob are each 40 years of age. Esau marries two Hittite women, “which were a grief of mind to Isaac and Rebekah.” Isaac is now 100 years old, and blind. A deception is practised on him, and Jacob obtains the blessing of the first-born. Esau’s wrath alarms Rebekah; she refers to the existing grievance of the Hittite women, and incites Isaac to send Jacob out of Esau’s way. Then Esau, perceiving the strong dislike of his father and mother to his heathen wives, goes to Ishmael, his father’s brother, and obtains one of his daughters. How simple and natural is the whole story, if we read it just as it stands, as occurring in the course of two, three, or four years! Ishmael was then alive, and his daughters might be of a marriageable age. But if we interpose a senseless delay of thirty-seven years, we suppose Esau going to Ishmael to ask for his daughter fourteen years after Ishmael was dead; and as Ishmael, if living, would have been 150

years of age, his daughter, sister to his first-born son, would also be, probably, nearly 100. I say, then, that the story should be read just as it stands, the events following each other with no great delay.

Owen. Well; and what difference does this make to the question before us?

White. It makes all the difference in the world. Esau marries at 40: his wives displease Isaac and Rebekah. Suppose a year or two pass. Jacob by subtilty obtains the blessing. Esau is angry, and threatens. Rebekah is alarmed, and recurs to the Hittite women. Isaac is moved, and sends Jacob to Padan-aram. If you allow five years for these transactions, you allow quite enough. This would send Jacob to Padan-aram in his 46th year. He is married after a servitude of seven years. Leah bears him four sons in succession, which, by the usual experience of such cases, ought to occupy eight years. Therefore Judah, the fourth, would be born in Jacob's 61st or 62nd year; and going down to Egypt when Jacob was 130, would then be about 68 years old.

Owen. And is this Mr. Skinner's view, of whom you spoke just now?

White. No; Mr. Skinner confines himself to the one point, that in Gen. xxxi. Jacob, he says, speaks not of *one* period of twenty years, but of *two*. And thus, throwing Jacob's migration to Padan-aram twenty years further back, he reckons him to have been, not 77, but 57 years old when he came to Laban. I have preferred to begin at Jacob's 40th year, and to trace the transactions step by step. It matters not, however, which hypothesis is the right one. Whether Jacob went to Padan-aram

in his 45th, or his 47th, or his 57th year, by either date Bishop Colenso's whole argument is demolished.

Owen. How so?

White. Why, his argument is, that Judah was only 42 when he went down to Egypt, and that thus it is evidently impossible that he should have had a son, Er, and that after that son's death he should have begotten Pharez of Er's widow, and that Pharez should have grown up and had two sons, Hezron and Hamul, before the going down to Egypt. But add twenty or twenty-five years to the length of Judah's life, and the impossibility vanishes. A man of 68, or of 62, might have seen his son's death, might have had a child by his widow, and might have seen that child grow up, and have two infants born to him, without any sort of impossibility. So that, as I said at the outset, Bishop Colenso bases his first objection, placed in the very front of his book, upon a mere supposition, which has not been proved, and which cannot be proved, and which is encompassed with difficulties and contradictions.

Owen. Well, I begin to see that; but how was the bishop to be aware of all these things?

White. Why, had he been but a man of moderate reading, he must have been aware of them. Mr. Skinner's view was entirely adopted by Dr. Kennicott, another learned Hebraist of George the Third's days. It was examined by Bishop Horsley, who declared the argument to be "unanswerable." And it now takes its place in all our Commentaries.*

* Such as Dr. Barrett's *Synopsis*, Dr. A. Clarke's *Commentary*, Bagster's *Comprehensive Bible*, and the *Annotated Bible* of the Religious Tract Society.

Yet Bishop Colenso appears as ignorant of all this as if he had never opened a commentary of our own day! And, as I have remarked, when he gets into a difficulty, he writes off for three or four German critics, and they are just as ignorant as himself!

Owen. And what, then, is your verdict on this part of the case?

White. I say, first, that if the facts had been as Bishop Colenso represents them, the objection would still have been a petty and trivial one; sufficiently answered by the obvious probability that the list had been made some time after the going down to Egypt, or that, if made at that time, the names of Hezron and Hamul had been subsequently added. But secondly, and chiefly, I say that the main fact of the bishop's whole case is a mere supposition, and an erroneous supposition: That such critics as Kennicott and Horsley denied, more than half a century ago, that "Judah was 42 when he went down to Egypt:" and that to be unaware of this shows gross ignorance on the part of Bishop Colenso; while, to assail the credibility of God's word merely because he had not taken the pains to understand it, shows something much worse than ignorance.

DIALOGUE III.

OBJECTIONS ON ARITHMETICAL GROUNDS.

Owen. I have thought over what you said yesterday, and I admit that the Bishop fails in his first position. I see that the case which he seemed to have made out as to Judah's family, crumbles to pieces the moment the date of Jacob's flight to Padan-aram is carefully considered; and I cannot help wondering that the Bishop should have overlooked or omitted so essential a point. What is the next subject to which we should direct our attention?

White. I think we may as well reserve the main question,—the numbers of the children of Israel at the time of the Exodus—to the last; and look meanwhile into the many minor and almost trivial difficulties which the Bishop conjures up, as rendering the story of the march through the wilderness "incredible." And these difficulties divide themselves, I think, into two classes—those which are merely arithmetical or statistical; and those in which a Divine power is evidently asserted in the text, and overlooked by the Bishop. The first of these classes, probably, will suffice to occupy us during the present evening.

Owen. Which are the difficulties which you term "arithmetical" or statistical?

White. They are such as these: it is said that the Israelites were too numerous to be assembled

in front of the Tabernacle ; that they were too numerous to be addressed by Moses ; that it is not credible that they should have been provided with 200,000 tents ; or that the 600,000 men should all have been furnished with arms ; or that such a multitude of pigeons and lambs should have been attainable for sacrifices ; or that the priests should have been able to consume them, if they had been offered.

Owen. Well, and how do you meet these objections ?

White. Several answers suggest themselves ; some applying to one part of the case, and some to other parts. First, however, I must remark, that the bishop puts all his objections in a carping and hypercritical spirit. This is apparent in almost every page. For instance :

1. With reference to the objection we considered yesterday : nothing would have been more natural than that a chronicler or record-keeper, making, a few years after Jacob came into Egypt, a list of the patriarch's family, should include one or two children born after that event. But the bishop demands absolute precision ; and when he finds two names of persons who seem to him to have been born subsequently, he proclaims the whole list to be "unhistorical," *i.e.* untrue.

2. In the same exacting spirit he finds "all the congregation of Israel" ordered "to appear before the Lord ;" and he finds Moses "addressing all Israel." Immediately he insists that "all Israel" must have meant the whole two millions ; and that these could not have been assembled, nor could Moses have made himself heard. Now all this manifests a carping spirit. It shows a pre-deter-

mination to find fault. History is full—every-day-life is full—of instances in which a whole community is summoned and addressed, and in which we all understand by the phrase, “as many as could get within hearing.”

3. In the same hostile and incredulous tone the bishop finds, in Lev. iv. 11, 12, an order given to the priest to “carry forth” the offal of the bullocks offered, and to burn them without the camp. He then argues that the priests were too few to perform all this labour, and hence that the story is incredible. But if he had turned to the Hebrew, he would have found that the word properly means, “to cause to go forth,” *i.e.* to send away. Here, too, we all know that in many public offices duties are imposed on officers which they could not *personally* perform, but which they discharge by their assistants. This way of imagining an impossibility, by concluding that the priest must *himself* carry forth all the remains of the sacrifices, shows very clearly the spirit of fault-finding in which the bishop has gone about his work.

4. In the same spirit, when he finds that the children of Israel dwelt in tents, and were armed, he immediately begins to calculate the weight of a modern tent, and how many thousands of oxen would be required to carry 200,000 of such dwellings. Yet all travellers tell us of the tents even now used in those countries, as being little more than a long shawl stretched over a few sticks. And as to arms, who ever imagined, before this, that the expression implied that the Israelites had 600,000 swords, spears, shields, and bows? There is no historic narrative in existence which might not be assailed by such objections as these.

5. So of the Passover. Bishop Colenso insists upon it that, according to the story in Exodus, "*in a single day* the whole immense population of Israel was instructed to keep the Passover, and did keep it." He means, that the narrative says this; for his whole argument is, that the narrative is incredible—is a fiction. But here he makes the incredibility with which he finds fault. For the words of Exod. xii. are,—" Speak ye unto all the congregation of Israel, saying, In the tenth day of this month they shall take to them every man a lamb." "Ye shall keep it up until the fourteenth day," &c. No impartial man can doubt that the Israelites had several days' notice. But Bishop Colenso was fully determined to find fault; and therefore find fault he does.

I might adduce several other instances of this spirit; but these ought to suffice. I think you will admit that the bishop clearly shows a spirit of carping and hostile criticism, which taints his whole argument.

Owen. Yes, I do admit that he carries his objections too far, and is too plainly set upon making out a case against the Pentateuch. To a certain extent this, of course, weakens the moral force of all his observations. But will you now come to the main question: I mean, to his repeated objections, that the facts stated in many passages of Exodus are physically impossible?

White. I will do so without any further preface. The bishop's first objection of this class has something almost silly about it. Men of sense and discernment have read, for thousands of years past, the statement that God led the two millions of Israelites into the wilderness, and there directed

their movements ; and that He sometimes desired them to appear before Him at the door of the Tabernacle ; and at other times commanded Moses to speak unto all Israel. And no one, till Bishop Colenso appeared, ever found anything “incredible” or “impossible” in these statements. History abounds in similar cases—of whole communities being summoned to appear, and of their being addressed ; when it was impossible for them all to assemble, or for one-tenth of them to hear. In 1297 one of our kings summoned all the people of London to meet him at Westminster Hall. In 1815 Napoleon Bonaparte addressed about 100,000 people at the Champ de Mai, and addressed them as the French nation. Only the other day we heard of the Patriarch of Greece addressing the whole Greek army. In all these cases, men are accustomed to understand that, as many as could find admittance, crowded into the place of assembly ; and that perhaps one-tenth or one-twentieth of the whole heard what was said. But the bishop takes out his pencil, calculates the width of the Tabernacle ; finds that only nine men could stand in one rank in its front ; and then supposes the people drawn up in ranks of nine, with eighteen inches between each rank ; and reckons, that so drawn up, they would form a column of twenty miles in length ! Did you ever hear anything more preposterous ?

Owen. Oh ! I saw that *that* was very absurd. I suppose that the poor bishop never saw a large open-air meeting, or he would not have talked about ranks of nine, with eighteen inches between each rank.

White. Well, then, with respect to the “tents”

and the “arms” of the Israelites, the difficulty is only the same which runs through all history. When Herodotus tells us that the army of Xerxes consisted of 5,283,220 men, we may find it difficult to conceive how such a host could have been moved, or governed, or victualled ; but we do not, on that account, pronounce the history to be a mere fable. When our own historians tell us that in 1298, on the summons of the king, 100,000 footmen, and 4000 horse, assembled at York, in the cold, dark days of January, to march into Scotland to chastise Wallace, we find it hard to understand how, in and round a town of 10,000 people, such a host could have been accommodated, and fed, and kept from perishing, in the very depth of winter ; but no one has ever, on account of these difficulties, pronounced the fact to be incredible. In truth, all these objections are no greater than might be started with respect to every great event. Yet vast masses of men have, at many different periods of the world’s history, been assembled together ; and there are scarcely greater difficulties in the Jewish history than may be met with in the Persian, or the Gaulish, or the Tartar, or the Spanish, or many others.

Owen. What do you say to his question as to the “turtle-doves or young pigeons” which the women were to offer on the birth of a child ? He asks, “where the people could have obtained 250 pigeons daily ?” It struck me, I confess, as rather a foolish question.

White. Transparently so. All travellers in the East tell us of the vast number of pigeons which are constantly brought to market in those countries ; and our own naturalist, Bewick, in his book on

birds, states that a pair of pigeons will multiply, in four years, into the enormous number of 14,672. But ignorance of even the commonest things lies at the root of many of the bishop's objections.

Owen. I observed an extraordinary calculation he makes in one place, that, comparing the 22,273 first-born who were exchanged for the tribe of Levi, with the whole number of males, about 900,000—"each mother of Israel must have had on the average forty-two sons!"

White. Yes; this is a notable instance of the way in which, being resolved to find "incredible" things, he creates incredibilities where there are none. The Divine command in Exod. xiii. most clearly was prospective; it claimed for God all the first-born which *should be* born after that date. The numbering of these, which took place thirteen or fourteen months after, showed that out of the two millions of people, there were 22,273 male children who had been born since the law was given. All we learn from this fact is, that, in the joy of their deliverance, a large number of the younger of the Israelites had married, and thus there had been 22,273 births, of first-born males, within that period. There is nothing strange or at all "incredible" in this. Bishop Colenso creates the whole difficulty on which he dilates, by straining the command, making it apply even to the old men and the men of middle age, and so reckoning, that if there were only 22,273 first-born out of 900,000 males, then each mother must have had forty-two sons! But this monstrous result flows entirely from his choosing to read a commandment as retrospective, which clearly and indubitably looked only to the future.

Owen. I think there is one objection, of this class, which you have not adverted to: I mean, the supposed impossibility of a consumption by the priests of the slain victims; though I admit that it struck me as rather inconsistent, when I found the bishop objecting, on one page, that it was impossible that pigeons sufficient for the sacrifices could be found, and, almost on the next page, objecting that there would be so many that the priests could not eat them.

White. Yes; it is in this part more especially that the bishop shows himself in his true light, as one determined to find fault. But you have asked me what answer I make to these objections. I reply, therefore, thus:—

1. These ordinances of the established worship were made, not for the wilderness only or chiefly, but for a thousand years after. In Aaron's days the priests might be few, and the burden upon them might be heavy; but this state of things would soon pass away. Even in Joshua's days, there is evidence in abundance that the priests were numerous; and then Bishop Colenso's objections and difficulties vanish. Meanwhile, however, please to observe—

2. That, with reference to the question which the bishop absurdly puts, as to how three priests were to eat all those offerings or parts of offerings which were allotted to them, two passages in the Pentateuch seem to furnish a sufficient answer, or at least to throw light upon the subject. In Exod. xii., with reference to the Passover lamb, it is ordered,—“Ye shall let nothing of it remain until the morning, *and that which remaineth until the morning ye shall burn with fire.*” Here the

rule was, “Ye shall consume the lamb.” But what if this were impossible by eating? Then the remains were to be burned, and put to no other use. Again, at Lev. viii., Aaron is instructed to “boil the flesh at the door of the Tabernacle, and there to eat it with the bread.” But what if there were more than could be eaten? Then follows the proviso: “That which remaineth of the flesh and of the bread *ye shall burn with fire.*”

Owen. I see: nothing could be more obvious or proper. But what could possess the poor bishop to make a difficulty here?

White. It is only one more proof that he who hunts for difficulties and impossibilities in the Word of God will be left to his own devices, and will soon find plenty.

DIALOGUE IV.

DISREGARD OF THE SPECIAL PROMISES MADE TO
ISRAEL.

Owen. I think you said that, after the arithmetical and statistical difficulties, you would take up, as a distinct class, those cases which are clearly included in the Divine protection and support promised to Israel, and in which cases the bishop creates apparent difficulties by overlooking or disregarding that important fact?

White. Yes; I think that these cases should be taken by themselves. Out of all the bishop's difficulties or impossibilities, these are about one-fourth. For instance, he finds impossibilities in—
1. The march out of Egypt; 2. The providing for the cattle in the wilderness; 3. In the conquest of Midian; and in a few minor points. The principle is the same in all these cases. He either overlooks, or treats as of no importance, the special promises of God, to carry His people through the wilderness, and to bring them into the promised land.

Owen. Yes; I remember all these objections. And you propose, I think, to class them altogether; and to deal with them by one reply?

White. Yes; I think that they are all tainted with the same fault. Bishop Colenso professes to take up the narrative contained in the Pentateuch *as it is*, and to see if it is intrinsically credible.

But he wholly forgets to do this in the case of these parts of the history. He assumes that the two millions of Israelites were just like any other two millions of people ; and that, in marching out of Egypt towards Canaan, they were just in the same circumstances as any body of Syrians or Egyptians would have been. But you will see, in a moment, that this is not the story told in the Pentateuch. Not one word is there said of the Israelites having undertaken this great migration of their own accord, or of their relying on their own supplies. On the contrary, Moses, who shrank from this fearful undertaking, was encouraged and compelled to enter upon it by several miracles. He saw the bush burn without being consumed ; he saw the rod become a serpent ; he found his hand become leprous, and saw it instantly restored ; he saw the seven great plagues. And it was only after these many proofs of the mighty power of God that he felt emboldened and compelled to go on the errand on which God sent him. And so of the children of Israel. They also had seen the seven plagues ; they had seen the first-born of Egypt perish, while their own were preserved. And, besides all this, at the very first stage of their journey, a new and stupendous miracle was performed in the sight of the whole nation. An arm of the sea was divided to make a way of escape for them ; and its waves then overwhelmed their enemies. Thus, from the very beginning, their camp was publicly declared to be under God's protection, and His honour was pledged to bring His people through.

Now this makes just the whole difference. Bishop Colenso insists on leaving out of the case

all God's part in it, and in arguing as though the Israelites were left to their own strength, their own conduct, and their own resources. So arguing, he finds the Pentateuch "incredible." Of course it is; but then the Pentateuch never represented the matter in this light. Let the books speak for themselves.

At the very opening of the story of the Exodus God declares the work to be His own. "I am come down to deliver them out of the hands of the Egyptians, and to bring them into a good land." Would Bishop Colenso have dared to reply, "The work is too great for Thee?"

The sea being divided, and the march begun, the people soon want bread. It is sent down out of heaven for them. They next want water. The rock opens, and pours it out for them. Bishop Colenso sees all this, and does not question it; but he turns to the cattle, and asks, How could they exist for many successive years in the wilderness? And because the particulars of this miracle are not recorded, the bishop declares their preservation impossible, and the whole story a fiction!

Pass on to the nineteenth of Exodus, and you will find the Lord Himself addressing the Israelites, and saying, "Ye have seen what I did unto the Egyptians, and how I bare you on eagles' wings, and brought you unto myself." Forty years after, just before the death of Moses, he amplifies this statement in the following manner:—

"The Lord's portion is His people; Jacob is the lot of His inheritance. He found him in a desert land, and in the waste howling wilderness; He led him about, He instructed him, He kept him as the apple of His eye. As an eagle stirreth up

her nest, fluttereth over her young, spreadeth abroad her wings, taketh them, beareth them on her wings: so the Lord alone did lead him, and there was no strange god with him. He made him ride on the high places of the earth, that he might eat the increase of the fields; and He made him to suck honey out of the rock, and oil out of the flinty rock." (Deut. xxxii. 9-13.)

In less poetic language did Moses appeal to the personal experience of the Israelites, saying, "I have led you forty years in the wilderness: your clothes are not waxen old upon you, and thy shoe is not waxen old upon thy foot. Ye have not eaten bread, neither have ye drunk wine or strong drink: that ye might know that I am the Lord your God." (Deut. xxix. 5, 6.)

Surely, in the face of these plain declarations, it is childish to ask, How can these things be? Stand by the side of Immanuel, God with us. At a word, six large vessels, filled with water, suddenly overflow with the finest wine. At another word, five loaves are expanded into five hundred. A third command silences a tempest. A fourth brings a multitude of fishes to a spot where, just before, there was not one. Surely Bishop Colenso cannot help seeing that the presence of such a power as this, in the wilderness of Sinai, fully meets all his difficulties and objections? Well, that same Divine power *was* present in the whole journey from Egypt to Canaan; and, consequently, all these difficulties about grass for the cattle, &c. become, at once, quite futile and absurd. The whole story is told in Ps. lxxviii.:-

" Marvellous things did He in the sight of their fathers, in the land of Egypt, in the field of Zoan.

He divided the sea, and caused them to pass through; and He made the waters to stand as an heap. In the daytime also He led them with a cloud, and all the night with a light of fire. He clave the rocks in the wilderness, and gave them drink as out of the great depths. He brought streams also out of the rock, and caused waters to run down like rivers. He rained manna upon them to eat, and gave them the bread of heaven. He rained flesh also upon them as dust, and feathered fowls like as the sand of the sea. He led them like sheep, and guarded them in the wilderness like a flock."

Owen. Oh, yes, I remember that passage very well.

White. But do you not see, that if these plain declarations of the Psalmist are believed, all the supposed difficulties about want of sustenance in the wilderness vanish away? Does Bishop Colenso believe, or disbelieve, St. Matthew's Gospel? If he disbelieves it, then let him boldly declare himself a disciple of Paine and Voltaire. But if he accepts the Gospel as a true history, then he beholds the Lord Jesus, at a word, supplying 5000 men with bread from five loaves. These deeds in the wilderness in the year A.D. 27, seem to prove and confirm the narrative of Moses, of the deeds in the wilderness in A.M. 2513. The same power which fed 5000 people on one occasion, could, with equal ease, feed thirty times as many on another. To believe the testimony of St. Matthew, therefore, and yet to reject the testimony of Moses, is altogether irrational. If one account is credible, so is the other.

Owen. I observed that Bishop Colenso threw doubt upon the narrative of the conquest of Midian,

as if it were intrinsically incredible. He speaks of "the story related in Num. xxxi., where we are told that a force of 12,000 Israelites slew all the males of the Midianites, 48,000 in number, and carried off 32,000 captives." This is characterised as an "incredible statement." Yet, if the bishop had been acquainted with secular history, he would easily call to mind a variety of similar occurrences. I know that in one of the greatest of the battles between England and Scotland, the battle of Falkirk, all our old chroniclers tell us that 32,000 Scots were left dead upon the field, while the English lost but 28 men. And this story, incredible at first sight, is not so when scrutinised. For the Scots were unable to strike a blow. They were first disordered by a ceaseless flight of arrows from the English bowmen, and then, when in confusion, they were broken and trampled down by 7000 heavy horse. But history presents scores of examples of this kind, of panics, or the rout of armies, in which the loss and suffering are all on one side. There is nothing incredible in such a fact.

White. No. I am well aware of that ; but here, too, I must remind you that there was a special promise that thus it should be. In Deut. xi. God says :— "There shall no man be able to stand before you ; for the Lord your God shall lay the fear of you, and the dread of you, upon all the land." And in Exod. xxiii. He had said :— "I will send My fear before thee, and will destroy all the people to whom thou shalt come ; and I will make all thine enemies turn their backs unto thee." And in Lev. xxvi. 8, still more specifically, it was promised : " Five of you shall chase an hundred, and an hundred of you shall put ten thousand to

flight; and your enemies shall fall before you by the sword :" so that the bishop's objection arises simply from this:— that God had kept His promise ! With how much more reason would he have found fault, if, after such assurances as these had been given, it turned out that the Israelites had to fight their own way, just like any other invaders ?

Owen. Yes, I see that, now; and I wonder that so obvious an argument did not occur to Bishop Colenso, and prevent his advancing so futile an objection.

White. Before we part, I must notice one more blunder of the bishop's. He devotes one whole chapter, the 13th, to show that the Israelites were more than enough to fill the land of Canaan; and hence, that the words, "I will not drive them out before thee in one year, lest the land become desolate," (Exod. xxiii. 29), are quite unmeaning. All this mistake arises from his having overlooked a distinct and special promise. In the very chapter which he quotes (Exod. xxiii.), the land promised to the Israelites was, "from the Red Sea unto the sea of the Philistines, and from the desert unto the river :" a country five times as large as that which Joshua divided. The cause of this failure is distinctly explained in Josh. i. ii.; which chapters, if we are to judge by the bishop's book, he must have neglected to read.

DIALOGUE V.

THE NUMBER OF THE ISRAELITES IN THE
WILDERNESS.

Owen. You said, I think, that you reserved the chief question of all, the number of the children of Israel at the time of their leaving Egypt, to the last. Do you mean, then, to take it up this evening?

White. Yes, I think we may as well dispose of that in our present conversation. It deserves to be taken by itself; for it is, in truth, the only vital part of the controversy.

Owen. Why do you call it so? and how do you distinguish it from the other points which have come under our consideration?

White. I think that the difference is very obvious. Suppose that I could find no sufficient answer to the bishop's question as to Hezron and Hamul; do you think that a trivial point of that kind would have at all shaken my belief in the books of Moses? If I could have found no other way of explaining the matter, I should certainly have believed it to be an interpolation, or a clerical error, introduced by some old scribe or copyist. No doctrine, no important fact, depended upon it; and I assuredly should never have given up books of such immense value as the Pentateuch, merely because two names had crept into a long list which I thought ought not to have been there. Neither

should I have cared much about difficulties respecting lambs or pigeons. But here we have a different question altogether. In Exod. xii. we have the positive declaration, that the Israelites who marched out of Egypt were “600,000 men, besides children.” In Num. i. we have a census taken, and the number of those who were “able to go forth to war” is stated to have been “603,550.” In Num. xxvii. we have another census, taken long after, and the number is there declared to be “601,730.” Now, if Bishop Colenso, or any one else, could make it quite clear that, as he alleges, there could not have been 60,000, or even 6000, I confess that I should be sorely perplexed. To have a main, central fact like this—a fact which is reiterated again and again—to have it set aside, or made to appear a fiction, would bring the whole Bible into doubt. Hence, as I said, I think that this one point is worthy of our most serious and undivided attention.

Owen. Well, I suppose that you have carefully considered it, and what has been the result of your thoughts upon it?

White. A sort of mingled feeling: of anger, that a man should assail God’s Word on such weak and frivolous grounds; and of pity, when I thought of the guilt connected with such an attack.

Owen. You think, then, that the bishop fails in this part of his case?

White. Not only fails, but fails disgracefully. By all men possessed even of common candour and fairness, he must be severely condemned for the flippancy and hollowness of the arguments with which he assails the truth of this portion of God’s Word. Do you remember the mode of his attack?

Owen. I think, as far as I can recollect, that he takes the list of Jacob's grandsons, fifty-four in number, from Gen. xlvi., and allows to them each $4\frac{1}{2}$ sons. He then picks out a few cases in which the space from Jacob to Moses was covered by four individuals; and thus arrives at the conclusion that there were only four generations between Jacob's time and the Exodus. Then he shows the rate of increase in the following manner: "In Kohath's days there would be 54 males; in Amram's, 243; in the time of Moses and Aaron, 1094; and in that of Joshua and Eleazar, 4925: that is to say, instead of 600,000 warriors, there could not have been 5000" (page 103). Thus the story told in Exod. i., which speaks of the time of Moses and Aaron, and says that "the children of Israel increased abundantly, and multiplied, and waxed exceeding mighty, and the land was filled with them," is flatly denied by this bishop, and declared to be a mere fiction!

Owen. Yes, I know that; but how do you meet the bishop's calculation?

White. I heard an acute logician once exclaim, "Oh! I never care anything for figures; anything may be done with figures!" As a sensible man, he did not mean to deny the certainty of arithmetic, he only meant to say, "Let me pick out, or take for granted, the figures I want at the outset, and I can produce any result I please." And so it is in this case. Bishop Colenso picks out a few cases which suit his purpose; such as Levi, who lived to be 137; Kohath, who lived to be 133; Amram, who was 137 when he died; and Moses, who was 120. These all, apparently, married late in life, and had few children, and by selecting

these, and shutting his eyes to all others, the bishop gets at his two conclusions—1. That four generations cover the whole period from Jacob to the Exodus; and that each father had, on an average, only $4\frac{1}{2}$ sons. And in this way, in 215 years, 54 males grow into 4923.

Owen. But please to show me how else you would work the sum.

White. First, I will show you what different results would have been obtained if the bishop had worked it in another way. For instance. Jacob went down to Padan-aram, the bishop thinks, in the 77th year of his age. He stood before Pharaoh in his 130th year, or 53 years after. In those 53 years, his male descendants had become 68. Therefore, in each 18 years since his entering Laban's house, the males of his family had *quadrupled*. Now the bishop is very fond of saying, "Let us suppose that they increased in this way from generation to generation." Well, had he applied this rule to Jacob's posterity, he would have found that, quadrupling every 18 years, as Jacob's own family did, the children of Israel, the males only would have become, in less than two hundred years, more than 280,000,000 ! Or again, take the case of Benjamin, of whom the bishop says, "Benjamin, though called a youth, was more than 22 years old, according to the story, at the time of Jacob's migration. It is therefore quite possible that he may have had ten sons, perhaps by several wives" (page 26). I do not agree with the bishop, but let us take his own view, and apply his own rule. "Let us suppose that they increased in this way from generation to generation." Take out your pencil and find the result.

Owen. The result of what ?

White. Why, Benjamin having ten sons at 22, "Let us suppose that they went on increasing in this way :" in 22 years more there would be 100 : Go on with the calculation.

Owen (writes). In 44 years, 1000 ; in 66 years, 10,000 ; in 88 years, 100,000 ; in 110 years, 1,000,000 ; in 132 years, 10,000,000 — Why, at this rate, they would have filled Asia in less than 200 years ! But why do you go into these monstrous suppositions ?

White. Merely to show you how absurd it is to argue upon one, two, or half-a-dozen cases. The bishop, too, shuts his eyes wilfully to all the facts that lead to a different conclusion from that at which he intends to arrive. He is resolved to find only four generations between Jacob and the Exodus. Yet he might have seen Joseph, who was about 39 when the 215 years of Israel's stay in Egypt began, fondling the fourth generation, Ephraim's great-grandchildren (Gen. L. 23), only 70 years after. Not one-third of the 215 years had expired — 145 years yet remained. Obviously six or eight more generations might be expected before the time of the Exodus arrived. And this is confirmed by 1 Chron. vii. 22-27, which tells us of "Joshua, the son of Nun, the son of Elishama, the son of Ammihud, the son of Laadan, the son of Tahan, the son of Telah, the son of Rephah, the son of Beriah, the son of Ephraim.

Owen. Was there not a reduction of the term of life going on about this time ?

White. Unquestionably there was, and with it, a quickening of the date of marriage. Isaac married at 40, Esau at 40, Jacob still later. But Ben-

jamin must have married at 20, Asher at 20 (Gen. xlvi. 17), and Ephraim at 20. Do you not see how this change would naturally accelerate the growth of population?

Owen. I see that it would; but I have not considered to what extent.

White. The calculation is an easy one. Isaac married at 40, and had no children till 60. His son Esau married at 40, when his father was 100. Therefore, a whole century passed over before father and son were more than two. But Joseph married at 35, and Ephraim his son probably married at 21; and the consequence was, that before Joseph died, aged 110, he saw many children and grandchildren. Clearly, the earlier men marry, after they have reached a proper age, the faster must population increase. Hence, in shutting his eyes to this great change, and reckoning only four generations in 215 years, the bishop rushed inevitably into important errors.

Owen. But tell me now, how do you think he ought to have framed his calculations?

White. I am sure that, first of all, he should have resisted the temptation to construct a theory upon one, or two, or half-a-dozen facts; especially facts picked out to favour foregone conclusions. He has so contrived to place his figures as to bring out a result of "4923 males." Another person, as I have shown, arguing from Jacob's increase, might have shown a result of 280,000,000! or, from Benjamin's increase, of a still greater number. But all this is mere child's play; it does not advance the real question one iota.

Owen. Well, but I asked you to tell me, how

the question ought to be handled, so as to give us an answer of any value?

White. There is no difficulty about it. The law of human increase has been investigated and expounded, and there is no obscurity about the question. One of the chief writers on the subject thus sums up the known results:—

“ In the northern states of America, where the means of subsistence have been ample, . . . the population has been found to double itself, for above a century and a half successively, in less than twenty-five years. . . . In the back settlements, where the sole employment is agriculture, and where vicious customs and unwholesome occupations are little known, the population has been found to double itself in fifteen years. . . . According to a table of Euler, calculated on a mortality of 1 in 36, if the births be to the deaths in the proportion of 3 to 1, the period of doubling will be only twelve years and four-fifths.”*

Owen. Do you hold with Malthus?

White. I cannot quite go his length. I doubt the 15 years, and the $12\frac{1}{5}$ th years. But I suppose that an 18 years' or a 20 years' doubling is credible enough. And you will remember that Jacob went down to Egypt under a special promise, “ I will there make of thee a great nation.” Hence, I think, that we are entitled to suppose that the Israelites grew and multiplied in Egypt, quite as fast as any nation ever did, in any other time or place.

Owen. I should think so. You incline to say,

* Malthus on Population, vol. i. p. 6.

then, that the family or people that went with Jacob down to Egypt would increase during the 215 years at the rate of a doubling every 18 years?

White. Yes, that seems to me a reasonable calculation.

Owen. But what is the number that we are to take at the beginning of the period? What are the first figures of our sum in arithmetic? Do you agree to the bishop's proposal, of starting with 54 males?

White. Certainly not. Did you ever hear a more absurd idea than that eleven sons of one man all married, and had fifty-four sons among them, and only one daughter?

Owen. The bishop argues, that as one daughter is mentioned, that is a proof that more would have been named if there had been more.

White. The reason is insufficient to establish so extraordinary a fact. The rule throughout the East is, and always was, to be silent as to females. Adam, we may be sure, had daughters, yet we have not the name of any one of them. Shem, Ham, and Japheth, had daughters, but only the sons are recorded. David had daughters (2 Sam. xiii. 18); but only one is recorded, because that one figures in history. In like manner Dinah is the only one of Jacob's daughters who is named; she, too, occasioning a catastrophe. But the plain words of Gen. xlvi. 7, decide this question. Jacob went down to Egypt with "his sons, and his sons' sons, his daughters, and his sons' daughters." And it is reasonable to suppose that the general rule held in his case, and that the daughters were about the same in number as the sons. Hence, as 65 sons

and sons' sons are named, it would be reasonable to estimate the whole family, sons and daughters, with the grandchildren, to have been about 120 or 130 in number. Then we must add the servants.

Owen. The bishop gives seven or eight reasons for thinking that Jacob had no servants.

White. Yes, I know he does; and I never saw a more painful exhibition of a determination to resist plain facts, and to make out his point by any means. He even argues that the sending Joseph alone to seek his brethren was a proof that his father had no servants; as if Jacob himself had not been sent in the same manner alone to Padanaram, at the very time when it is declared of Isaac his father, that "he had great store of servants!" (Gen. xxvi. 14.) But as to Jacob, the Scripture is quite explicit. In Gen. xxx. we read, that "Jacob increased exceedingly, and had much cattle, and maid-servants, and men-servants, and camels and asses." In Gen. xxxv. we are told that he "came to Luz, he and *all the people* that were with him;" and at Gen. xlvi. it is said that "Joseph nourished his father and his brethren, and *all his father's household*."

Owen. You need hardly say more; there can be no doubt on this point. What, then, do you estimate the whole number of Jacob's family and "all his household" to have been?

White. I think that, taking the children of Jacob, and their wives and children, at 130, we shall form a moderate estimate, if we allow them 300 or 400 servants; and so reckon the whole clan or tribe to have been about 500. You will remember that Jacob's grandfather was able, on one occasion, to arm 318 men-servants; and it is not

probable that Simeon and Levi stormed and took a city with less than 200 men.

Owen. No; I think you are not extravagant in your ideas. Do we fix, then, upon 500 as the probable number?

White. It seems to me a moderate and safe estimate. Take, then, your pencil, and set down 500; and then work out the sum. Double their numbers every eighteen years (as we just now agreed) until you come to the end of the 215 years.

Owen. Let me see:—in 216 years there would be just twelve eighteens. I therefore begin with 500; double it in eighteen years; bringing out 1000—(a pause)—Oh! I make the result, in 216 years, just 2,048,000.

White. Very well; but remember, we have Joseph's family, the children of Ephraim and Manasseh, to add. However, on the whole, the result appears to be, that beginning with a moderate estimate—500—and doubling every eighteen years, which is far less than Mr. Malthus would assert to be probable—we find, at the time of the Exodus, a total population of rather more than two millions; being the very number which the Bishop so confidently declared to be “impossible.” His words are:

“It is quite impossible that there should have been such a number of the people of Israel in Egypt at the time of the Exodus, as to have furnished 600,000 warriors in the prime of life; representing at least two millions of persons, of all ages and sexes: that is to say, it is impossible, if we will take the data to be derived from the Pentateuch itself” (page 101).

Owen. Yes, I remember that passage. But you have taken all your data from the Pentateuch

itself ; you have then merely worked the sum upon Malthus's principles, moderately applied ; and the result is, exactly the two millions. I don't see, therefore, that you have left the bishop, in this part of the case, a leg to stand on.

White. So it seems to me. But the bishop, at this part of his book, adds a short chapter, to show that in some of the details "the results will be yet more extravagant" (page 107). He instances, first, the tribe of Dan, who, in Gen. xlvi., appears to have had only one son. Yet in Num. ii. this tribe is found to have 62,700 ; while the ten sons of Benjamin had only increased to 35,400.

Owen. Well, what do you say to that ?

White. I remark, first, that this is not like fiction. No concocter of a false story would have acted thus : he would assuredly have given the ten sons of Benjamin a larger mass of descendants than the one son of Dan.

But, secondly, such things do occur in real life. I remarked, in the newspaper yesterday, the death of an old man recorded, who, at 78 years of age, had 12 children, 65 grand-children, and 12 great-grand-children. I contrasted his case with that of King George III. The king, you know, had 14 children, including six remarkably fine and handsome young men. Yet, when he had reached his 78th year, instead of having 65 grandchildren and 12 great-grandchildren, his only granddaughter died, and there was a serious alarm lest the family should become extinct. And even now, those six sons of George III. have left behind them only two male descendants. Hence we see how possible it is for a family, which promises great expansion in one generation, to dwindle away in another ; while a

family which had small hopes, suddenly grows and spreads, and becomes a multitude.

Owen. But I think the bishop insists upon it, that a growth from 1 to 62,700 is extravagantly impossible, and that the real increase of Dan's male children could only have been from 1 to 27.

White. Yes; that is, according to his rule, of four generations and $4\frac{1}{2}$ males in each family; a rule which I have already shown to be absurd. But as to the possibility of Dan's increase, in the 215 years, from 1 to 62,700, nothing can be easier than to demonstrate that. There went down to Egypt with Dan, one son, named Hushim; and as Dan was next to Judah in seniority, he might be 50 or 60 years of age, and his son, 25 or 30. Suppose Hushim to be married to one of his cousins, and a family to spring up around him, only equal to that of the old man of whom I just now spoke. Hushim, 45 or 50 years after, would count, with his children and grandchildren, 90 souls. Let the same sort of increase go on, and it is not at all excessive—it is less than took place in Jacob's family—and you would find many more than 62,700 men in 215 years.

Hushim and his wife, married at the beginning of the 215 years at the age of 24, would have increased, in 54 years, to 90 persons, or 45 times. At the end of another 54 years, at the same rate of increase, there would be 4050; and at the end of the third 54 years there would be 182,250 men, women, and children. Thus, long before the 215 years had run out, the number, which Bishop Colenso deems so "extravagantly incredible," would have been attained and largely exceeded.

Owen. The bishop then goes on to the sons of Levi; but as Levi had three sons, while Dan had only one, it is clearly more probable, on the face of the story, that the Levites should increase to be 22,000 in 215 years, than that the Danites should grow in the same time to the larger number of 62,700.

White. Obviously so. And here, I think, we may end this part of the discussion. Surely you cannot but feel that there is no one averment of the bishop touching "the numbers of the children of Israel," which will bear the least investigation. The things which he deems "impossible" are abundantly possible; and as "incredibility" and "impossibility" are his main accusations, I think that we may safely conclude that he has egregiously failed.

Owen. Well, I cannot deny that I am much of that opinion.

DIALOGUE VI.

GENERAL REVIEW.

Owen. Well, I fancy we must have nearly come to the end of our argument. What do you propose that we should take up this evening?

White. I think that we may usefully review the whole subject, and ask ourselves, on that review, what Bishop Colenso has accomplished by his book. He meant, avowedly, to destroy all belief in the credibility of the books of Moses. Has he succeeded? has he established any one count of his long indictment?

Owen. I cannot say that he has; but I shall be glad if you will briefly go over the ground which we have traversed in our late conversations.

White. I shall willingly do so. And first, you will remember, I objected to the course which the bishop had taken, in resorting, so soon as doubts began to harass him, to the critics of Germany for help. I can discover no solid reason for this preference; on the contrary, in the course of this inquiry I have found, as I should have expected, that good and satisfactory elucidations of all the passages objected to may be met with in English expositors, while among the Germans there are few or none. The significant fact, too, remains to be noticed, that the men in England, who are most fond of appealing to the German critics, are those who evidently desire to get rid

of the authority of the Bible. I believe, indeed, that the chief and most lauded of the German critics are nothing more than a new generation of the Voltaires and Tom Paines of the last century, clothed in a more decent and plausible garb. All this, however, is only preliminary: it concerns not so much the bishop's book, as the way in which he prepared himself for writing it.

Owen. Perhaps you will come, then, to the book itself, and re-state, in a few words, its chief arguments.

White. The first, you know, was a very trifling affair; but it claimed some notice, from being put in the very front of the battle; and as giving proof, at the outset, of the mode in which the bishop meant to conduct the inquiry. It concerned two children, Hezron and Hamul, whose names appeared in the list of those who went down to Egypt with Jacob, and who, the bishop argued, could not then have been born. The bishop vaunted this fact, as if the credibility of the Pentateuch was thereby shaken to its very foundation. I suggested two replies:—

1. That (as in the case of the genealogies in Matt. i. and Luke iii.) the list of Jacob's children was probably a public document, handed down from the time of Jacob and Joseph; and that if it was compiled about the time of Jacob's death, there would be nothing surprising in the fact that two or three names of children, not born until after the coming into Egypt, had been added. But,—

2. I remarked that the whole "impossibility" suggested by the bishop vanished, when it was remarked that Judah, at the time of his going

down into Egypt, was, probably, not 42, as Bishop Colenso imagined, but upwards of 60 years of age. So Dr. Kennicott and Bishop Horsley believed; and to their views Bishop Colenso has never once alluded. Yet upon this single fact, passed over without notice by him, the whole question turns. I believe that Jacob was married before he was 60; that Judah was born between 60 and 70 years before the going down to Egypt; and hence that there was no impossibility in the birth of Hezron and Hamul before that migration. But, touching this view of the question, Bishop Colenso says not one word. Clearly, then, he has not shaken my faith at all by his supposed "impossibility" of the birth of these two children. The view which I take, supported by some of the highest names in Biblical literature, is not so much as touched by anything that Bishop Colenso has said.

Owen. I see that, and do not need any more satisfaction on that point. The next question, I think, concerned some difficulties as to meetings of the Israelites in vast numbers. I do not think you need say much on those points; for I have recollected many cases, in ordinary history, in which large assemblies of whole nations or provinces have been called, and in which it seems to have been taken for granted that those who could find room or get within hearing should represent the whole mass. Thus, "the people of Jerusalem" are often spoken of as dealing with Pilate about Jesus; yet we know that not so many as five thousand of them could have got within sight or hearing of Pilate, or have taken any part in the transaction. The bishop's objections as to the impossibility of assembling the people before the Tabernacle, or of

bringing them within the sound of Moses' voice, appear to me very futile, and unlike the language of a man accustomed to common life.

White. And I must add, that the next class of objections—that of the impossibility of finding food for cattle in the wilderness, and other remarks of the same kind—seem to me to transgress one of Bishop Colenso's own rules. He professes to inquire, whether the narrative is consistent with itself—whether, on the data given in the Pentateuch, the story is credible. Yet, in dealing with the special provision made for the Israelites in the wilderness, he constantly leaves out the principal fact—that God, the Almighty Ruler of all things, had promised the Israelites His support, and that the fact of that support having been given, is repeatedly stated in the Pentateuch itself. Now this fact, thus left out of Bishop Colenso's view, is just the main point of the question. Read over all his “difficulties” and “incredibilities,” and you find, in a moment, that the presence and interference of Him who made five loaves sufficient to feed five thousand men, at once removes them all.

Owen. Yes, I see that without any difficulty. You next spoke, I think, of the great question of whether the children of Israel could have amounted to 600,000 men, or two millions in all, at the time of the Exodus.

White. On which point I remarked, that the bishop had only reached the point at which he arrived by the most arbitrary courses. He first chose to assume that Jacob's sons, eleven in number, had 54 sons among them, but only one daughter. He next shut his eyes to several plain statements, that Abraham, Isaac, and Jacob, had servants in great

numbers ; and he took for granted that the 70 persons named in Gen. xlvi. were all that went with Jacob down to Egypt. I replied, that Jacob's daughters, and his son's daughters, are distinctly mentioned, and that "great store of servants" are also spoken of in many places. Hence, I deemed 500 persons to be a low estimate of the whole tribe or clan. I then showed from Malthus that a doubling every 15 years was deemed by economists to be possible, but I preferred to allow 18 years for each doubling. This, in 215 years, gave a total of more than two millions of people, the very number which the bishop had described as "impossible." And so, by the plainest and simplest process, he stood utterly confuted by the facts of the case. What, then, remains to be added ?

Owen. I hardly require it, and yet I should like you to notice the indignation which the bishop expresses, with reference to the "massacre" of the people of Midian ; which he, rather rashly, compares with the massacre of Cawnpore.

White. Such remarks are more than rash ;— they are daringly profane. The awful judgments executed upon the Canaanites, Midianites, &c., do not stand alone ; and no one gains anything by disbelieving or censuring those judgments, unless he can, at the same time, contrive to disbelieve a large part of history. What of Sodom and Gomorrah ? Was the sacrifice of life in that case less than in the extermination of the Midianites ? Or will Bishop Colenso deny to God the right of judging and punishing such flagrant cases of wickedness ? Again, if the bishop disposes of both these cases by simply rejecting the whole Pentateuch as a romance and a fable, what will he do

with the destruction of 70,000 of the people of Israel, as a punishment for David's vanity? or the "massacre," if he likes to call it so, of 185,000 Assyrians, as recorded in 2 Kings xix?

Owen. Perhaps he will say that he rejects and disbelieves all these statements, because he deems them opposed to his notions of the goodness of God.

White. Very well; but that answer does not end the difficulty. He must come lower down, even to times when "legends" and "forgeries" hardly passed as history. Will he disbelieve Josephus, confirmed as he is by many other writers? Will he question the fact, that Jerusalem was destroyed; that, by a wonderful concurrence of circumstances, the Romans were forced, against their will, to "lay it even with the ground," and to put to death, in the most severe and cruel way, more than eleven hundred thousand of the Jewish people? Can he shut his eyes to the many predictions of these events by Moses, Daniel, and by the Lord Himself? or can he doubt, that GOD was the overruling cause of all these judgments, and inflicted them righteously? What end, then, can it answer, to find fault with the lesser instances of the same kind, or to disbelieve, merely because he chooses to disbelieve, what he calls the "massacre" of Midian; while far greater punishments, of exactly the same kind, remain on record, which it is impossible to doubt or deny? The truth is, that all these questionings arise from the determination of wilful men to imagine a God who is "such an one as themselves." The plain declarations of His own word they cannot bear. Peter spoke with plainness and certainty when he said,—

"God spared not the angels that sinned, but

cast them down to hell, and delivered them into chains of darkness, to be reserved unto judgment: He spared not the old world, but brought in the flood upon the world of the ungodly: He turned the cities of Sodom and Gomorrah into ashes, making them an example to those who lived in ungodliness." Here is one of the latest declarations of one of Christ's own apostles; and warnings of similar judgments are given, in the very last page of the Bible, by "the disciple whom Jesus loved." And if a man receives the testimony of Peter and John, he will gain nothing by refusing that of Moses. If he rejects them all, let him not insult the common sense of mankind by calling himself a Christian.

Owen. Well, I admit this also; for I see that the facts are mighty, and I dare not attempt to

"Re-judge His judgments—be the God of God."

I know that "He giveth no account of any of His matters;" and I feel that for me to attempt to deal with such "high things" would be the extremest folly. But did you observe the bishop's remarks on a passage in Exod. xxi., concerning slavery? He says, I think, of a Zulu, who was translating the Bible with him, that "his whole soul revolted against the notion, that the Merciful Father of all mankind would speak of a servant or maid as mere 'money,' and allow a horrible crime to go unpunished, because the victim had survived a few hours." He adds, "My own heart and conscience fully sympathised with his" (p. 9).

White. I did; and I confess that I read those remarks with terror, when I thought of the guilt and remorse which the writer was heaping up for his own soul.

Owen. You think them more than ordinarily criminal, then ?

White. Assuredly I do. A bishop, or indeed any one who had received any sort of theological education, ought to have known better than to have ventured such remarks. Just as rationally might he have cited Abraham's two wives, or Jacob's, or any other feature of patriarchal or idolatrous times.

Owen. How do you regard the injunction in Exod. xxi. then ?

White. Properly to understand it, you must look at the state of the world, and of mankind generally, at the time. In Abraham's day, there was no written word of God, or visible Church. Men had gradually declined, as at the first, and both polygamy and slavery were in common and, probably, general use. God purposed, by gradual revelations of Himself, to build up a Church, and by that Church to purify mankind. Christianity, His work, which was foreshadowed in Abraham, has driven both of these evil practices out of large portions of the earth. But in the days of the patriarchs this work was only commencing. When Abraham and Jacob and Moses lived, slavery was universally practised. Our Lord tells us that divorce was allowed to the Israelites for a time, "because of the hardness of their hearts." So, had the keeping of slaves been suddenly prohibited, it would have been a putting new wine into old bottles, which would have caused only destruction. Dealing gently with them, God gave, by Moses, only regulative laws. He did not command them suddenly to free all their slaves. Had he done so, general disobedience would probably have been the result.

But he led them to regard their bought-servants as fellow-creatures. He threw the protection of law around them. As for the expression at which the bishop declares himself to have been so greatly shocked

Owen. "For he is his money"

White. It is merely tantamount to saying, "The master has already suffered some punishment, for he has lost his own property." The words "money" and "property," you know, are often used for each other. Of a man of large property you say, "He has plenty of money," although, probably, he may have very little coin in his possession. To say of a slave, or bought-servant, "He is such an one's property," startles no one. But the bishop finds the words, "for he is his money," and he professes to be terribly shocked. This is either cant or effeminacy. Any man of plain common sense must see, that if a general manumission was not to be ordered, the slaves or bond-servants must remain the property, the possession, of those who had bought and paid for them. The laws of Moses were designed to protect them, and nothing more. Bishop Colenso could scarcely have professed himself shocked or startled if the phrase used had been, "He has suffered the loss of what was his property." And to be so revolted merely at the use of the word "money" instead of "property" is scarcely like a man. Have you any other question?

Owen. Only, I should like to hear what you thought of the bishop's concluding remarks.

White. I suppose you mean those pages in which he suggests that, "in order to avert the shock which our children's faith must otherwise experience when they find, as they certainly will

before long, that the Bible can no longer be regarded as infallibly true in matters of common history," (p. 152), we should "teach them at once to know that they are not to look for the inspiration of the Holy One" "in respect of such matters as these, which the writers wrote as men, with the same liability to error as other men," but "in that of which their own hearts alone can be the judges," "in that which speaks to the witness for God within them."

Owen. Yes, I remember those words—that is the passage which I mean. What do you say to it?

White. You know we talked of this, when we were considering the *Essays and Reviews*. It simply brings us to the point where Rousseau, and Hume, and Voltaire, and Thomas Paine, all stood. All these men, and all their followers, were quite willing to admit that there was a God, and that there were fine and noble passages in the Bible. But they all claimed, just what Bishop Colenso claims, an absolute right to deal with the Bible as judges and arbiters—to take what they pleased, and to reject what they pleased; assigning no other reason than this, that one part commended itself to their hearts, and another part did not. In Bishop Colenso's view, the heart of man is to be the sole judge of the truth and value of every single passage of the Bible. How would he deal, then, with such passages as these?—

"God saw that the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually" (Gen. vi. 5). God said, "The imagination of man's heart is evil from his youth" (Gen. viii. 21). "The heart of the sons of men is fully set in

them to do evil" (Eccles. viii. 11). "The heart is deceitful above all things, and desperately wicked; who can know it? I the Lord search the heart, I try the reins" (Jer. xvii. 9, 10). "Out of the heart proceed evil thoughts, murders, adulteries, fornications, thefts, false witness, blasphemies" (Matt. xv. 19).

These plain and distinct declarations of the character of the heart of man—several of which are put into the mouth of God himself—must either be believed or disbelieved. If the bishop accepts and gives credit to them, what can be more absurd, than to make a wicked, deceitful, and treacherous heart, the sole arbiter of the fitness and validity of Scripture declarations? But if, on the other hand, he rejects and discredits them, then he is in this strange position, that he still speaks of the Bible as a message from God, and assures us that "the Holy Spirit speaks to us in the Bible," and yet, at the same time, he maintains that this Book bears false witness, both of man, and also of God! What folly can go beyond this? "Doth a fountain," asks St. James, "send forth at the same place sweet water and bitter? Can a fig-tree bear olive-berries, or a vine, figs?" A book stuffed with falsehoods, and yet inspired by the Spirit of God, is the account given of the Bible by Bishop Colenso!

Owen. But you say that a great number of celebrated men, Rousseau, Hume, &c. &c., have adopted this view; that the Bible is inspired, and yet that it is not all true: do you remember whether any number of them have ever agreed as to what portions of the Bible are inspired, and what are false?

White. Agree ! the thing is impossible ; it is intrinsically absurd. One of these men—Rousseau or Theodore Parker—will declare the character of Christ to be superhuman ; to be resplendently divine. Another, F. W. Newman, will audaciously declare, that the same character is faulty and defective, and that various grave errors and misdoings are to be detected in it. Some of these “pickers and choosers” delight in St. John’s Gospel, and think that it alone fairly represents the Saviour : others (as in the *Essays and Reviews*) prefer the first three Evangelists ; and reject the portrait drawn by St. John. There is no end to these contrarieties. A Southern American glories in those passages of the Old and New Testament which recognise slavery ; a Northern would strike them out of the Bible. Assemble even so few as a dozen of these men who are for making the heart of man the supreme judge, and desire them to go through the Bible, and divide the true from the false ; you would be sure of a dozen different verdicts. Truth, in fact, is one ; but error is multifarious.

Owen. The bishop, however, seems to wish to show, in his closing pages, that there is One Faith, one general consent, in which, according to him, Cicero, the Sikh Goroos, and the Brahmins of Bengal, all concur ; and which to him (the bishop) seems “noble,” “holy,” “heavenly,” “almost divine.”

White. Oh ! yes ; I know he does ; and you can tell me, without any difficulty, what kind of a faith, what kind of a religion, that is. You have read over those passages, I suppose, which the bishop quotes from these heathen writers ; and you can tell me what impression you received from them.

Owen. Well, certainly, to my mind, they contained nothing more than mere Deism. I felt, that if in these passages we had, indeed, the teaching of the Spirit of God, as Bishop Colenso supposes, then it must be difficult to understand why Christ ever visited this earth, or died upon the Cross. If Deism is the truth of God, and "contains all things necessary to salvation," then Christianity is wholly a mistake; an Established Church an absurdity; and a bishop of that Church, sent from England to the Zulus, the most preposterous thing that can be imagined.

White. You remember especially his quotation from Cicero?

Owen. Oh, yes! have you got it with you?

White. Yes, it begins:—

"Law, properly understood, is no other than right reason, agreeing with nature, spread abroad among all men, ever consistent with itself, eternal, whose office is to summon to duty by its commands, to deter from vice by its prohibitions."

And it ends,—

"There will be one common Master, as it were, and Ruler of all, namely, God, the great Originator, Expositor, Enactor, of this Law; which Law, whoever will not obey, will be flying from himself; and, having treated with contempt his human nature, will in that very fact pay the greatest penalty, even if he shall have escaped other punishments, as they are commonly considered."

Owen. Yes; and I think that the bishop quotes from Lactantius the opinion, that Cicero here "depicts that holy, heavenly Law, with a voice almost divine;" and that he speaks by some kind of "Inspiration."

White. Yet there is not one word in this passage from Cicero which goes beyond mere Deism ; is there ?

Owen. No ; I observed that.

White. And you cannot but be aware that Deism is the most cold, dead, inoperative thing in the world. Other faiths have wrought wonders,—that of Mahomet, in overrunning and conquering the world ; that of Christ, in civilising and saving it. But Deism is a mere lifeless theory. The Christians of England, as I have said, raise among themselves at least half a million of money every year, to send men to teach the heathen Christianity ; and some considerable results have already followed their efforts. New Zealand has been almost wholly won to Christianity and civilisation. Of the islands of the Pacific, many have been gained ; and in South Africa and West Africa, in Burmah, India, and Madagascar, converts have been gained by tens of thousands. But did you ever hear of a Deist missionary, or of a society to propagate Deism ? Do not Deists generally treat their belief as an hypothesis, a mere theory, touching which they feel no certainty, and which excites too little interest in their hearts to induce them to spend a single guinea in its propagation ?

Owen. Well, I cannot say that I ever saw a Deist who seemed to feel much interest in the matter.

White. How, indeed, should he ! for what are the hopes or fears of Deism ? That same Cicero, whose language concerning law Bishop Colenso quotes with so great delight, as if he would say, “ What can any one want more ? ” — that same Cicero, writing to his friend Titius concerning the

life to come, has nothing better to offer than this:—

“Death cannot be considered as an evil; because, if any consciousness remains after our dissolution, it is rather an entrance into immortality than an extinction of life; and if none remains, there can be no misery where there is no sensibility.” He adds, that “he who has made his exit from a scene where such dreadful confusion prevails, cannot possibly be a loser by the exchange.” So that the present life, argues this great Roman, is a scene of confusion; and to escape from it is something. What is to follow, he cannot tell; it may be annihilation, it may be immortality. If man, after death, is annihilated, he will feel no sorrow or pain: if he still lives, why, that will be immortality; though whether of bliss or woe, Cicero knows not. Such is the state and such the prospects upon which Bishop Colenso would drive us back. He has been told, in God’s word, that “Life and immortality are brought to light by the Gospel.” He has heard, hundreds of times, that “Christ died for our sins, according to the Scriptures; and that He was buried, and rose again from the dead;” and that “because He liveth, we shall live also.” All this, however, he seems willing to give up, and to fall back upon Cicero’s faith, or rather uncertainty, and upon Cicero’s hope, of either annihilation or some sort of immortality!

Owen. Yes, I remember, I think, that this was the last point you urged against the authors of the *Essays and Reviews*. In fact, I suppose that it necessarily results from quitting the foundation of Holy Scripture.

White. Unquestionably it does; for, after all,

the main point of the whole controversy is this: Have we a revelation from God? In a word, "Is the Bible true?"

Owen. Well, I think that the bishop, in one or two places, seems to favour this belief. I remember that he calls the Bible, in one place, "that book of Truth;" and in another he says, that it "contains a message of God to our souls."

White. Oh, yes! I remember those expressions; but I can only exonerate the bishop from the charge of wilful deception in using them, by supposing that he has contrived completely to deceive himself. His book is written and published with the avowed purpose of destroying our belief in the Bible; and then, in the last chapter, he volunteers some empty compliments, which sound like the "Hail, Master!" of Judas, while he was in the act of betraying Christ.

Owen. But why should you say that he desires to destroy our faith in the Bible, when at present, at least, he has merely questioned the truth of the Pentateuch?

White. I might reply by asking you, What trust you think the simplest Sunday-scholar would put in the Bible, when he had learnt that the first five books in the volume were discovered to be groundless and incredible fictions? But it is not true that the bishop attacks the Pentateuch only. In his last chapter—that same chapter in which he calls the Bible "that book of truth"—he plainly asserts, "that the Bible can no longer be regarded as infallibly true in matters of common history." Now you know that these "matters of common history" occupy more than one half of the Bible. And accordingly, when other historical

books, such as the *Chronicles*, stand in the bishop's way, he dismisses them at once, as "unreliable." And when our Lord himself speaks of the *Pentateuch* as written by Moses, the bishop at once disbelieves Him, asking, "Why it should be thought that He would speak with certain Divine knowledge on this matter, more than upon other matters of ordinary science or history?"

Owen. Well, I suppose, then, that the bishop really means to say, that there is not a fact recorded in the Bible which we ought to believe as certainly true, merely because the Bible states it?

White. Unquestionably that is the plain meaning of his assertion, "that the Bible can no longer be regarded as infallibly true in matters of common history." It is also the general drift of his book. He will not believe that the children of Israel possessed and supported large flocks and herds in the wilderness, because he cannot understand how, in a wilderness, this could be done. If he had been scrutinizing the Gospels, he ought, to be consistent, to have disbelieved the feeding five thousand men with five loaves, for the very same reason. But, in short, you have stated the case correctly. If "the Bible is not to be regarded as true in matters of common history," then it follows of necessity that every single fact, on which Christianity is based, is uncertain and unreliable.

Owen. Yes, I see that the bishop, in using this general form of expression, does, in fact, question all Scripture as a history.

White. Surely, for if he deals with the Gospels in the same spirit, he must discredit the miraculous birth of Christ, most or all of His miracles, and

His resurrection and ascension. Every one of these facts is quite as “incredible” as the Exodus of the Israelites, or their passage through the wilderness; a history which the bishop utterly rejects, merely because he cannot understand the *modus operandi*, or reconcile it with the experience of common life.

Owen. But what, then, is the “message from God,” which he thinks the Bible contains?

White. So far as I can see, he deems it to be “The Name of God;” “I AM;” “Jehovah;” “the Living God;” the “name of Him,” “in Whom we live, and move, and have our being;” “upon Whom the whole universe depends” (page 154).

Owen. Yes, I remember, *that* is the one doctrine which he finds in the passages which he quotes from the Sikhs and the Brahmins. He seems to regard Deism as the essential truth of religion.

White. Yes; and I have already remarked that it is a dead, cold creed, leading to nothing, but altogether fruitless and unprofitable. I should also like to ask, How the bishop proposes to rest this doctrine upon, or to prove this doctrine by, a book, or five books, which he stigmatises as a collection of incredible fictions? If these books, published as the writings of Moses, never were written by Moses, but were a mere fraud, practised upon the Israelites some centuries after; if the history they relate is intrinsically incredible, and in all its parts untrue; how can the bishop, with the least show of reason, pick out from the midst of all these falsehoods a single verse or passage, and call it “a message of God to our souls?” Did you ever hear of a more absurd proceeding? Here is a certain document, the Bible, which men have been

accustomed to regard as the word of God. They gave it implicit belief, because they took it to be God's word. But Bishop Colenso takes up the first five books, and soon declares them to be incredible fictions. Yet at the very same moment he selects a passage from Exodus, which he declares to be a "message from God." If we ask, Why ? the answer is, that "the spirit's eyes," seeing these truths, "recognises them as eternal verities." We are not to believe them on the ground that God spake by Moses, but because our own spirit recognises these truths as eternal realities. But are men's spirits, then, generally in agreement on this, or any other point in theology ? If God had, indeed, given to man's spirit, universally, a conviction of His Unity, how came the wise and enlightened Greeks and Romans to fall into polytheism ? If He had not given them such a conviction, but judged it necessary to reveal this great truth in the Bible, why did He permit it to be mingled with a heap of "incredible" stories ? In short, if the Bible be not true — be not, throughout, a Divine Revelation, how can any doctrine be established by it ? Of old legends and romances we have plenty ; but did any rational man ever commit such an absurdity, as to attempt to prove a great Truth by the testimony of a book which he at the same time declares to be, itself, Untrue ? After all, however, the most strange and most melancholy part of the whole business, is the deliberate soul-suicide which the poor bishop seems bent upon committing. And the more credit we give him for sincerity and earnestness in his mission to the Zulus, the more sad does his resolved rejection of the Bible appear.

Owen. Would you call it a “rejection” of the Bible?

White. What else can I call it? I know indeed that he speaks, again and again, of the Bible as containing “a message from God.” But if you ask him to show you, or to define that message, it comes at last to this, that such things in the Bible as he likes, he receives as Divine, and such things as he does not like, he rejects as Human. Now this is, after all, tantamount to a rejection of the document itself. Its authority, as the word of God, is denied. It would be useless for me to quote any one passage from it, as the utterance of the Holy Spirit: if that passage did not suit the taste of the bishop, he would immediately reject it. This I term a rejection of the Bible; and its effect is nothing short of soul-suicide.

Owen. That is a strong term; but I suppose you mean, that without the salvation revealed in God’s word, man is without hope; and hence that for a man to try to disprove the truth of the Bible, is to strive to cut himself off from the only prospect of life, and joy, and blessedness?

White. Just so. I will give you one faint similitude. Imagine a poor foundling, brought up in neglect and poverty, ignorant of his own origin, and quite without hope as to the future. Suppose, then, a stranger comes to him, and says, “I am sent to search you out. I bring you the best tidings. You are the heir of a princely rank and estate. Come with me, and I will place you among the highest and the wealthiest of the land.” Now, that the poor outcast should at first deem these tidings too vast, too glorious to be true, I can understand. That he should ask to be shown some proof of the truth of this intelligence is,

natural. But that when wills, and registries, and proofs of descent are laid before him, and when he finds that men of deep learning and high intellect have pronounced in favour of the genuineness of these documents,—that he should still resolve not to believe, would surely be strange. But if he began to argue strenuously, and to show a determination not to believe, and even to reason unfairly and partially against himself,—would not men say, that here was a sort of madness not often to be found,—a determination to prefer poverty and degradation to wealth and honour, which was very near akin to lunacy itself?

Owen. Yes ; but do you mean to say that this is the bishop's case ?

White. I mean to say, that the simile presents only a very faint idea of the poor bishop's delusion and self-destruction. First, consider where, by nature, he finds himself. Let me describe this in the words of Pascal ; a man as much greater than Colenso, as Colenso is greater than a poor ignorant Zulu. Pascal says :—

“ When I see the blindness and wretchedness of man, and the astonishing contrarieties of his nature ; when I behold the universe silent, and man without light, abandoned to himself, and lost, as it were, in this corner of the universe, without knowing who has placed him there, or what he is come to do, or what will become of him after death ; I feel panic-struck, like a man that might have been carried asleep to some desert island, and wake without knowing where he is, and without any means of escaping from it.”

Such is this great philosopher's picture of man *without* the Bible.

Now let me show you man *with* the Bible, in

the person of a Fellow of Bishop Colenso's own college, the admirable Henry Martyn. Martyn was seized, in India, in the midst of his labours, with one of those sudden attacks which, in that country, so frequently carry men off in a few hours. In his journal he writes:—" This morning, while getting up, I found a pain in the centre of my body, which increased to such a degree, that fever and vertigo came on, and I fainted. After recovering my senses, and lying in pain which made me almost breathless, I turned my thoughts to God, and, praise to His grace and love, I felt no fear. By means of some ether, the Lord gave me ease, and I made my will. The day was spent in great weakness, but my heart was often filled with the sweetest peace and gratitude for the precious things God had done for me. O God of love ! how shall I praise thee ? Happiness, bliss for ever, lies before me. Thou hast brought me upon this stage of life to see what sin and misery are : myself, alas ! most deeply partaking in both. But the days and works of my former state, fraught with danger and with death, are no more, and the God of benevolence and love hath opened to me brighter prospects. Thine I am. ' My beloved is mine, and I am His,' and now I want none but Thee. I am alone with Thee in this world ; and after death I shall be still with Thee ; not to receive honour, but to ascribe praise. I shall then, without intermission, see and love ; and no cloud of sorrow overcast my mind. I shall then sing, in everlasting strains, the praises of that Divine Redeemer, whose works of love now reach beyond my conception." Now here we find, in the soul of a man of learning and science, a settled peace

and joy in the prospect of death. Upon what did that happiness and comfort rest? Unquestionably, upon God's revelation of Himself in His own word. If you could have deprived Martyn of his belief in the truth and certainty of the Bible history, you would have thrown him back into the mental darkness which Pascal had described. He would have been "without hope, and without God in the world." It was the full and firm conviction which he felt of the truth of the Bible which filled him with this "joy and peace in believing."

Owen. Perhaps the bishop will say, that this was enthusiasm.

White. He has said many other absurd and untrue things, and may add this to the number, if he pleases. But there never was a character more free from enthusiasm than that of Henry Martyn. The Senior Wrangler of his year, far better known as a sound reasoner than ever Bishop Colenso was, or will be, Martyn believed nothing merely because he liked it. All the old doubts and difficulties about the Bible, which Bishop Colenso has hashed up for the five hundredth time, had been examined by him, and found wanting. He gave his life, and everything he had to give, to the one work of spreading the truth of God, as declared in the Bible. But, as to enthusiasm — commend me to Bishop Colenso, who, with the history of the last eighteen hundred years before him, and with the recorded failures of a long line of sceptics, vastly superior in skill and learning to himself — rushes back to England, to fire off his paper pellet against the Bible, and evidently imagines, that after surviving all those attacks, the Light of Life is going to be extinguished, in this year 1863, by

his wretched guesses and blunderings about the Pentateuch !

Owen. But do you not speak too harshly of him, as one wishing to extinguish the Light of Life ?

White. I think not: I judge merely of the plain fact before me. The statements, the allegations of the bishop, touching Holy Scripture, are, as coming from a man who has taken the vows of a presbyter and bishop, of an awful character. They diametrically oppose and contradict the plain averments of Christ and His Apostles. St. Paul spoke of it as the chief privilege of the Jews, that "unto them were committed the oracles of God." He calls the written word, "the sword of the Spirit." He declares that "all Scripture is given by inspiration of God." St. Peter, citing a psalm, said, that "the Holy Ghost spake by the mouth of David." In his epistles he declares, in the plainest terms, of Scripture, that "holy men of God spake as they were moved by the Holy Ghost." Christ Himself again and again referred to Moses and his writings; and in his latest teaching, after His resurrection, He told His disciples that "all things must be fulfilled which were written in the law of Moses, and in the Prophets, and in the Psalms, concerning Him." Now, in the face of this, call to mind what Bishop Colenso hath said.

Owen. He has said, that Moses wrote none of these books. He has said that they must have been written long after Moses' day, by some unknown scribe. He has said, that the books said to be written by Moses, are full of monstrous and incredible fictions. He has said, that in five or six different cases, in which the writer puts words

into the mouth of God, it is quite impossible that God could ever have said anything of the kind.

White. Stop; that is quite enough. Do you not see the fearful character of the position he has taken? The Apostles, and their Master, all agree in regarding the Bible as "the Scriptures of Truth," "the oracles of God," "the word of God," the fruit of the inspiration of the Holy Ghost. He, on the other hand, represents it as stuffed with untruths. Now, let us suppose for a moment, that St. Peter and St. Paul were right, and that Bishop Colenso is wrong. Surely this must be admitted to be at least possible. But if it should turn out to be so, can you imagine anything more sad or more alarming, that the position of the man who, with such vows upon him, has thus spoken of the work of the Holy Ghost?

Owen. I see the solemn nature of the question. Let us hope, that as the bishop has taken up these views hastily, he may, after some longer consideration, repent of the evil which he has done, and strive to recal it as far as possible.

White. Amen! In such a hope I can very cordially unite.

THE TESTIMONY OF GEOLOGY TO THE
TRUTH OF THE BIBLE.

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THE TESTIMONY OF GEOLOGY.

DIALOGUE I.

THE AGE OF THE WORLD.

Owen. Ah ! James, is that you ? I suppose you are bound, as usual, for St. John's. Well, our road is the same for nearly a mile, so we may have time for a little conversation as we go. Upon what were your thoughts employed when I came up with you ?

White. I had been pondering, as I walked along, the various confirmations which have been supplied, by recent geological inquiries, of the Mosaic account of the Creation. I had taken up the first chapter of Genesis this morning, and thus my mind was naturally led to the consideration of that subject.

Owen. Confirmations of the Mosaic account ! Why, I thought that the fact was altogether of an opposite kind. I know many good people who have been greatly alarmed of late by the progress of geology ; fearing that men's belief in the books of Moses would be shaken, or even overthrown ; and knowing that the histories of Adam, Noah, and Abraham all rest upon his authority, and that the very fact of the Fall itself becomes a mere tradition, a doubtful story, the moment our trust in the Mosaic history is destroyed.

White. Yes, I am aware of all this—that is, I am aware that such a feeling of apprehension does

exist; but I believe that the alarm is utterly groundless. It seems to me that the support which geology has been made to give to the Scripture narrative of man's creation, and of the preparation of the earth for his dwelling-place, is something quite marvellous.

Owen. Well, you rather surprise me. But I believe you have given some thought to these questions, and I shall be glad if you will explain to me these testimonies of geology to the truth of Scripture which have so struck your own mind.

White. I shall very willingly try to do so; but our present brief walk will scarcely give us time even for an opening of the subject. However, let us take the very first sentence in Genesis; that will supply us with matter enough for this morning's walk.

Owen. "In the beginning God created the heaven and the earth." I know that geology alters our view of this verse. Formerly, men supposed that this magnificent act of God took place about 5800 years ago; and they had two vague ideas: Eternity, the meaning of which was too vast to be comprehended; and Time, which began, they supposed, not quite 6000 years ago. But now, geologists tell us that fish swam in our oceans millions of years ago, and that birds flew over the face of the earth hundreds of thousands of years before Adam was created. But how do these discoveries tend to the confirmation of the Mosaic narrative?

White. Nay, I do not limit my view to the first chapter of Genesis merely. But I am inclined to say, that the geological interpretation of these words, "In the beginning," which removes that "beginning" to some millions of years before

Adam's day, is more consonant to the general tone and purport of Scripture, with reference to questions of duration, than the narrow view which was current until within the last fifty years. Reduce the whole measurement of Time to a mere 6000 years, and you must "accommodate," or explain away, many explicit declarations of Scripture. "Behold, I come quickly," said the Lord himself. "Yet a little while," said St. Paul, "and He will come." "The coming of the Lord draweth nigh," said St. James. Now, measured by a standard whose maximum is 6000 years, these expressions are hardly defensible. So, again, when a whole lifetime of seventy years is called "a handbreadth," and the passing over of a shadow,—as "a vapour that appeareth for a little while, and then vanisheth away"—the language appears strained and hyperbolical, when we remember that seventy years is one-sixtieth part of the whole duration of the earth since the Flood.

But how exactly true are all these expressions, the moment we enlarge our view as geology teaches us to enlarge it! An angel looks down upon this earth, and sees it revolving round the sun for many long millions of years. He remarks its Palæozoic period, its Secondary, its Tertiary; for either of which, geology insists, a million of years is too small an allowance. Then a great change takes place, and the human period begins. What, to an angelic observer, is the life of man, but the passing away of a flower? How else can he regard a span of seventy years, compared with the—perhaps—seventy millions of years during which he has observed the earth's course? Such questions as—"Why was the Saviour's advent upon earth *so*

long delayed? Or, "Why must 1800 years elapse between His second coming and His first?" seem quite absurd. What are four thousand years with Jehovah, but as four days? And what are 1800 years, or even 4000 years, compared with the past life of the earth, but "a little while"—"a short space?"

Owen. Nay, now you are dislocating and throwing into confusion all one's long-cherished ideas of time and duration. Do you feel that you have solid ground for these vast suppositions or reckonings?

White. I apprehend that on this point there can be no room for doubt. This, at least, is clear,—that we must either shut geology out of view entirely, or else we must give some weight to the unanimous testimony of all its chief expounders. And here, you know, we have the late Archbishop of Canterbury, Dr. Chalmers, Dr. Buckland, Dr. Harris, and Hugh Miller, all concurring with the Lyells and Murchisons, and the other great teachers of geology in our day. Thus, Dr. Buckland speaks of the "millions upon millions of years;" and Professor Sedgwick testifies that the solid framework of the earth tells us of a "long succession of movements, each of which may have required a thousand ages for its elaboration." Hugh Miller asserts, that the different geological periods must each have required "millenniums of centuries" to produce the results which have come down to us; and Archdeacon Pratt speaks "of the vast and unknown antiquity of the earth, compared with which the 6000 years of its supposed existence are but as yesterday." Hence, I repeat, we must either try to shut our eyes and ears to geology altogether, or else we must admit its first and most positive as-

sertion, that this earth has a “vast and unknown antiquity.”

Owen. But, do I understand you to say, that you deem the Scriptures to be rather confirmed than contradicted by this view advanced by geology?

White. Certainly I do. Surely you can see, that on the supposition formerly entertained, that the heavens and the earth were created not quite 6000 years ago, there were difficulties in certain passages of Scripture which no interpreter could satisfactorily get over. Why was the Redeemer’s advent postponed so long? How can His promise to return “quickly,” or in “a little while,” be reconciled with a delay of 1800 years? Were the Apostles mistaken when they assured us that “the coming of the Lord draweth nigh;” and that “the Judge standeth at the door;” and in many other like expressions? All these questions arise from one mistake—*i.e.* in taking Time’s whole duration at 6000 years. But admit Archdeacon Pratt’s view—that the real antiquity of the earth is “vast and unknown, compared with which the 6000 years of its supposed existence are but as yesterday”—and all becomes plain. Or, accept the Psalmist’s words in their plain meaning, “A thousand years are in thy sight as yesterday,” and “as a watch in the night.” Take them, not as figure, but as fact. So argues St. Peter. Not only has God existed from all eternity, but this earth itself has existed for millions upon millions of years. What, then, is a mere 1800 years? It is “a little while.” And what is man’s life, even if it lasts seventy years? It is the life of a flower; it is the

shadow that departeth ; it is a vapour which the next breeze scattereth away.

Owen. But what are the past ages of the world to us ? And do not these large expressions of Scripture refer to God's eternal existence, rather than to anything else ?

White. They, doubtless, do speak of God as He is ; but I think that they also speak of the heavens and the earth as they are. We can imagine no comparison between earthly durations and eternity. Nothing can assimilate the one to the other. But between one portion of the earth's history and another, comparisons may be drawn ; and my remark is this : that if we adhere to the old supposition, that the heavens and the earth are not quite 6000 years old, we must be perplexed by many passages of Scripture ; whereas, if we accept the testimony of geology, that the life of the earth has already endured for " millions upon millions of years," all these passages become plain, simple, and strictly true. Hence I say that the discoveries of geology, which at first startled mankind, turn out to be more in agreement with the language of Scripture, than the more limited and erroneous views which prevailed in the last and previous generations.

Owen. Well, I confess that I feel more perplexed and amazed than satisfied.

White. Yes, I know that such a feeling is quite natural, and in fact, inevitable, when any one is suddenly called upon to give up long-cherished impressions. But I have reminded you of the only choice you have—" that we must either shut geology out of view entirely, or else we must give some

weight to the unanimous testimony of all its chief expounders." Our best commentators and expounders of Scripture of fifty or one hundred years back were ignorant of much which has been revealed to us. But now, hundreds of earnest students, many of whom have been Christian men, have prosecuted researches into the crust of the earth for fifty years past, and it will not be easy for you to shut your eyes and ears to the results of their investigations. If you go to the British Museum, you find long galleries filled with creatures whose history cannot be placed in the present or human period. If you go to Exeter Hall, you will hear lectures on Hugh Miller's discoveries and interpretations. In short, you must close your organs of sight and hearing very effectually to keep out the knowledge of these facts.

Owen. But suppose I do not?

White. Then you will soon come to a knowledge of what Archdeacon Pratt calls, "the vast antiquity of the earth." And what I want you to see, is, that however this fact may shock some of the pre-conceived notions of men, it is, in truth, more consonant with Scripture than the narrower view. All the language of God's word which has a bearing on duration of time, agrees with geological measurements, and is at variance with our older notions. Commentators have been for many long years straining many Scripture phrases, and trying to make them bear a meaning to which they are intrinsically opposed. Geology interposes, and merely remarks, that to recognise the plain and indubitable fact of the "vast antiquity" of this earth, removes the whole difficulty in a moment. Hence

I say, that its investigations rather tend to confirm our belief in the Bible, than to shake it.

Owen. But is this your chief reason for claiming geology as a friend, instead of suspecting it, as a possible foe?

White. Oh, no; I merely alluded to this topic, because it is obviously the earliest in the consideration. It arises from the very first sentence in the Book of Genesis. I have much more to say, but we shall not have time for any further talk this morning.

DIALOGUE II.

“ WITHOUT FORM, AND VOID.”

Owen. Good morning, James. Here we meet, as we met last Sunday. Shall we take up the same subject? You said, I think, that the point on which you then touched was only one of several, in which the truth of Scripture received support from modern investigations. Perhaps you will now mention some other?

White. Very willingly. Our last Sunday's conversation may be said to have turned on the meaning of the very first verse in the Bible — “In the beginning.” And I endeavoured to show you that believers in the Bible gain, rather than lose, by that view of the text, in the light of geology, which throws the beginning back, perhaps, some millions of years. I will now say a few words on the second verse: “The earth was without form, and void; and darkness was upon the face of the deep.” This is clearly intended to assert a certain state of the earth immediately before the commencement of that Divine work which, in a six days' creation, gave to the human race our globe in its present condition.

Owen. I suppose so; for it is instantly followed by the words, “And the Spirit of God moved upon the face of the waters.”

White. Well, then, the assertion with which we have to deal is, that when the Spirit of God began to act in this new creation, the material upon which

He had to work was this globe of ours, in a state of darkness, confusion, or chaos, and emptiness of all living things. You see, this is not a vague or unmeaning statement, but one very definite and positive, and not at all like a guess or supposition.

Owen. It had not occurred to me in that light; but now you call my attention to it, I see that the fact is so.

White. Well, then, here is another opportunity for asking, What says geology to this statement? Is any light thrown upon the subject by modern researches into the nature of the formation of the crust of the earth?

Owen. Why do you lay so much stress upon this? What does it matter what geologists think on such a point as this? The fact, be it true or false, has long since passed away.

White. Surely, if you reflect, you will see its importance. Some writers, within the last few years, have very coolly described the Mosaic account of the creation as a "speculation"—"the best account of the matter that could then be given." Now, if this were the real state of the case, and if the whole were a guess or an hypothesis, let me ask you what probability there was that Moses, writing two thousand years after the days of Adam, should hit upon a true account? This chaos, or state of confusion, had for more than twenty centuries passed away. Moses had never seen it; nor had any man ever seen it, to hand down the fact by tradition. If, then, so remarkable a fact is stated by Moses, and if geology, more than three thousand years after Moses wrote, begins to dig into the crust of the earth, and from its researches derives a certainty of the very same fact,

would you not say that the coincidence was very remarkable ; and that the combined testimony of all geologists to this fact does go some way towards proving that Moses, in making this statement long before geology was so much as thought of, must have had some knowledge of the facts of creation greater than human skill or reflection could have given him ?

Owen. Well, I do see that there is some ground for your conclusion. But are you not hastily taking for granted that geology establishes this fact—the second in the Mosaic account—that just before the six days' work, “ the earth was without form, and void ; and darkness was upon the face of the deep ?”

White. No ; I believe I am in no danger of error in this respect. I think there is scarcely any point on which geologists are more entirely agreed than this—that “ it pleased the Most High to doom the past worlds to sudden destruction, by the secondary agency of geological convulsions.”* Or, to use Cuvier’s words, “ Life has often been disturbed on this earth by terrible events—calamities which have moved and overturned to a great depth the entire outer crust of the globe. In these catastrophes the existing races of living beings have become extinct.”†

Owen. But how does the geological belief, that in past ages there have been such convulsions—how does it agree with or confirm the words of Moses ?

White. It is a more definite belief than that which you have stated. Geology does not merely believe in convulsions generally, but it describes them,

* Lardner, vol. xii. p. 157. † Cuvier, p. 17.

and it calculates the date of the last. Sir R. Murchison, one of the first of living geologists, tells us of traces now existing of "outbursts of great volumes of igneous matter from the interior, the extraordinary violence of which is made manifest by clear evidences." In another place he speaks of "convulsions utterly immeasurable and inexplicable," caused by "vast outpourings of the subterranean fires." It is quite clear, that while these convulsions must have destroyed all kinds of life, and so rendered the earth "void," they must also have clothed it with a thick, impervious mantle of vapour or steam, and must thus have caused "darkness to rest upon the face of the deep."

Owen. Did you say that geologists go further than this, and venture to fix a date for these events?

White. Certainly they do. Baron Cuvier says—"I am of opinion, with Mess. Deluc and Dolomieu, that if there is any circumstance thoroughly established in geology, it is, that the crust of our globe has been subject to a great and sudden revolution, the epoch of which cannot be dated much farther back than five or six thousand years ago."* And Dr. Lardner says—"By the general accordance of geological facts, it appears that the present, the human period, has now continued for not more than six or seven thousand years."†

Owen. Will you, then, be so good as to sum up the evidence, that I may understand its combined force?

White. Yes, I will try. It is quite agreed that the various geological periods were divided from each other by vast and sudden convulsions, which

* Cuvier, p. 171.

† Lardner, p. 157.

again and again swept away one state of things, and commenced another — ended one race of living creatures and introduced another ; and I have just shown you that geologists hold that the present, the human period, was thus ushered in about five, six, or seven thousand years ago ; so that here we have the chronology of Scripture substantially confirmed. And further, they allege that these convulsions were vast, immeasurable, and inexplicable, destroying all kinds of existing life, and pouring forth vast masses of subterranean fire. Now, every one can see that, while oceans of water lay floating about upon the earth's surface, the coming forth of "vast masses of subterranean fires," commingled with them, must have formed prodigious clouds of vapour or steam, which, resting upon the earth's surface, must have produced a condition of darkness, compared with which our densest fogs are noonday light.

Owen. So that geology tells us, in fact, of the day before the first day described by Moses, that it was just what Moses had declared it to have been — a scene of confusion, darkness, and absence of life ?

White. Precisely so. Geology declares, with positiveness, that the state of things called "the Tertiary period" — when huge mammoths walked the earth — was ended by a prodigious convulsion, raising vast mountains out of the depths of the sea, and changing the position of whole continents, and confounding all things in one huge uproar. It adds, that subterranean fires were largely concerned in producing this revolution, and hence that the boiling up of oceans must have produced dense clouds of vapour, covering the earth with darkness, and

effectually destroying life in all its various forms ; and, finally, it declares that this must have happened about six thousand years ago. Now, Moses, who had never studied geology, had told us the very same thing more than three thousand years since. The question then is, how he came to know it? That he should have guessed at such astonishing, such-apparently improbable facts, is a supposition of the most absurd kind. Hence we find, that the simplest way of accounting for this wonderful knowledge is, by receiving his own testimony, that he had long and intimate communication "with the Lord, the Creator of heaven and earth" (Exod. xxxiv.), and had learned from Him the wonderful history which we read in the first chapter of Genesis.

Owen. Yes, I see that this is indeed the simplest way of accounting for the fact ; and I see, too, that it is hard to surmise how else Moses should have learnt anything about this period of chaotic darkness. But did you not say that the date given by Moses agreed also with that which geologists fix, as the apparent epoch of the last great disturbance of the earth's crust ?

White. Yes, they entirely agree. Geologists tell us, as I have shown you from Cuvier and Lardner, that the human period must have commenced about five, six, or seven thousand years ago ; and that that was the apparent date of the last great convulsion or revolution, by which the Tertiary period was ended. Now, Moses, in his books of Genesis and Exodus, is careful to give us precise accounts of the births and ages of all the chief descendants of Adam, so as to make it clear that Abraham was born about two thousand or two

thousand and eight years after the creation of Adam, and that he (Moses) was born about four hundred years after that. The Jewish records then carry us on to the days of David and Solomon, and show us that the Temple was consecrated in the three thousandth year, or nearly one thousand years after Abraham's birth. And here we are met by Greek, and Roman, and modern chronology, which unites with the Jewish, and runs on for two thousand eight hundred years, to the present time. Thus, the history of the world, in the human period, according to the Book, exactly agrees with the date assigned to the same human period by those who have calculated by "geological facts," or "natural chronometers." Again, therefore, in this second leading fact, we find the inspired books strongly confirmed and supported by the investigations of geology. But here, I see, we must end our conversation for the present.

DIALOGUE III.

“THE FIRST DAY.”

White. Ah ! friend Owen, here we meet again, on our usual Sunday walk. Shall we continue our conversation where we left the subject last week ?

Owen. If you please. What is to be your topic this morning ?

White. As we have touched upon the first verse of Genesis, and also upon the second, I think we may now go on to verses 3, 4, and 5, in which the command is given for light to appear, and in which we have “the first day.”

Owen. You are not going to adduce *that* as if it were a statement which is supported by geology ? Surely, instead of finding a confirmation here, you must find a positive contradiction !

White. Why do you say so ?

Owen. Why, let any one take a walk through the collections in the British Museum, and he will see various races of birds, beasts, and fishes, having eyes, legs, wings, &c., all of which creatures, we are told, walked, or flew, or swam around this globe thousands of years before this “first day” described by Moses ; and over whom, I suppose, thousands of days must have passed, long before this supposed “first day.” You have, therefore, before you, not a confirmation to be exulted in, but a difficulty to be got over !

White. If the fact were just as you state it, I

should not feel the difficulty to be a very serious one. I should have a right, I think, to contend that the Jewish historian might reasonably start, like any other writer, from a given point or epoch. We call this the year 1862, because we begin our reckoning from the birth of Christ; and if any historian, inspired or uninspired, took in hand the history of man, as did Moses, he might very reasonably call man's first year, "*the first year*," and so on. But I am not going to content myself with this mode of defence. I have something more to urge. I do not believe that the "evening and morning," which Moses calls the "first day," were merely an evening and morning like millions of others which had previously passed over the earth. The fact — and it is a remarkable fact — to which I want to call your attention, is, that while Moses tells us that about 5860 years ago there occurred for the first time what we now call "a day," — geology comes in with its confirmation, and says, "I discover proofs that the climate of the earth, its temperature, and other circumstances, were not, in the geologic periods, what they are now." Thus, Dr. Lardner, in his *Geology*, remarks that "a striking difference between the present and all former periods of the earth's history consists in the climatic zones. In all former ages and periods, no traces of climatic difference have been found."* There was during those periods one uniform high temperature over the whole earth. So says Professor Phillips, remarking, "That, during early geological periods, the northern zones of the earth enjoyed a climate approaching to that now confined to the equatorial regions, is admitted among the

* Lardner, pp. 553-561.

established inferences of geology."* Sir R. Murchison says: "A very great portion, if not the whole surface of the earth, enjoyed at that time an equable and warmer climate."† And Sir Charles Lyell remarks, that "Sir J. Herschel lately inquired whether there were any astronomical causes which may offer a possible explanation of the difference between the actual climate on the earth's surface and that which appears to have formerly prevailed."‡ Now, Sir J. Herschel would probably inquire in vain as to the relations of the sun and the earth six thousand years ago; but it is obvious that a question had crossed his mind whether the sun was not, at the commencement of the human period, brought into some new position or relations with reference to the earth. Professor Phillips, too, tells us, that "it has been conjectured that the earth's axis has been displaced; so that parts once under the more direct action of the sun have lost much of his beneficial influence."§ Do you not see what a striking confirmation is here given of the statement of Moses, that, at a certain period, not quite 6000 years ago, "God said, Let there be lights in the firmament of the heaven, to divide the day from the night; and let them be for signs, and for seasons, and for days, and for years?" (Gen. i. 14.)

Owen. But does not Moses say, that God then "made two great lights?"

White. Yes, he does; and I know that objectors often argue as if Moses had told us that the sun was never created until the fourth day described

* Treatise on Geology, vol. ii. p. 267.

† Ib. p. 524. ‡ Ib. p. 126.

§ Life on the Earth, p. 152.

in Genesis; and they then refer us to the pre-Adamite beasts and birds as a proof of the incorrectness of such a statement, and to the prior existence of light. But Moses had said nothing of "creation" in those verses. The language used is that which will apply equally well to things already existing. Whenever Moses means to assert that God made anything out of nothing, or called it into existence, the word used is "created;" here it is only "made," and the word in the original, I believe, is often used for "appointed," "set," or "constituted." Thus the Queen "makes" a Lord Chancellor, not by forming him out of nothing, but by appointing a man to that office. So, I apprehend, the sun and moon may have existed for millions of years, and some kind of light from the sun may have visited this earth, or a kind of phosphoric light may have existed. But now we are told, that God "set them"—the sun and moon—"in the firmament of heaven," to give light, and to divide the day from the night, and "to be for signs, and for seasons, and for days, and for years."

Owen. What, then, is your notion of the Divine act which then took place?

White. I believe that it was a real act of regulation or appointment, which took place on the fourth of those great six days. I do not think that God at that time created the sun and moon, for Moses says nothing of the kind. I suppose that as the earth, in another condition, had existed for many millions of years, so the sun may have existed for millions of years also. Nay, the sun, and moon, and earth may have been connected then as they are now, although in a different manner. The earth may have had light from the sun,

and yet the creatures on the earth may never have seen the sun. Geologists tell us, that the sort of condition suitable to the production of our great coal-beds, which, you know, are the remains of vast forests and thickets of fern, and fern-like plants, would be a moist, warm, dark atmosphere. Professor Phillips says, "There is good reason to adopt positively the opinion, that the chemical constitution of the atmosphere has been greatly altered" (page 164). He adds, too, "A warmer atmosphere would hold more moisture in suspension" (page 165). And Sir Charles Lyell adduces grounds for "concluding that the temperature of the northern hemisphere was considerably more elevated when the carboniferous and other strata were deposited than it is at present; and that the climate was modified more than once during those periods."* A warm climate, these writers all tell us, prevailed then, everywhere, even in regions which are now covered with perpetual ice. Surely, then, we have abundant ground for supposing that the pre-Adamite world was a very different world from that which we now live in. The sun may have been in the heavens, and may have given light, and yet constant clouds, or rather mists and vapours, hanging about the earth, may have hidden his face from the creatures living on the earth's surface. The different climates now found in different parts of the earth did not then exist. Probably the varying length of the days, as well as the different climates, was unlike what we now know. When I am told that the climate was everywhere the same, and everywhere warm, I am led to surmise, also, that there were no hot and

* *Principles of Geology*, p. 196.

cold days, no hot and cold seasons: in short, that summer and winter were then unknown; while the polar regions and the tropics were alike warm, and *that* at all times; partly, we may suppose, from the earth's internal heat. Hence, without attempting to depict from the imagination what the earth then was, we have a right, from geology, to argue, that on the fourth day there actually occurred what Moses has described — a revealing of the sun and moon to the earth; a parting of the clouds; and such an "appointment" of times and seasons, of days and years, as the earth had never known anything of in its previous history.

Owen. Well, all this may be a probable supposition; but will you explain to me what the confirmation is, which you say geology gives in this matter to the Mosaic account?

White. I think it is tolerably apparent from what I have already said. Moses declares to us, very explicitly, that on a certain "fourth day," about 5860 years ago, God "set," or appointed, the sun and the moon to certain functions and offices with reference to the earth; and that then, in that week, signs and seasons, and days and years, first began to be known. Now, I am aware that hasty and sceptical students of science, when they have discovered birds or beasts who apparently lived long before the time of Adam, rush to the conclusion that all the narrative of Moses is shown to be mere fable. But all this they assume, for they cannot prove it. They assume that the mammoths and reptiles of the pre-Adamite period lived as we live, and had days and years, and summer and winter, just as we have them. But the single fact of a universally warm climate in those

times at once throws doubt on this supposition. The second fact, that the growth of the vast deposits of coal, formed of gigantic ferns, would require a different sort of atmosphere and climate from any known to us, confirms the doubt already raised. And both go to establish the probability that when Moses declares a particular appointment or arrangement of the sun and moon, with reference to the earth, to have been made in the first week of the year in which man was created, he speaks the simple truth. We want no accommodation ; no evasion. I find Moses stating, that on the "fourth day" the sun and moon were set "for signs and for seasons, and for days and for years." Geology tells me that it has discovered, that in the pre-Adamite period there was one climate over all the earth, and apparently no summer and no winter ; so that our present variety of climate, and probably of season also, were made for man, and made only when man was created to enjoy them. I find, therefore, in a third particular, the word of God confirmed by the researches of science ; and again I say, What wondrous testimony has not geology been made to bear, to the truth of the Mosaic record !

DIALOGUE IV.

THE CREATION OF MAN.

Owen. Well, friend James, what strange thing have you got to tell me this morning? Or have you really finished your series of proofs or coincidences?

White. No, I have not quite done yet. I think our topic this morning may be the statement of the 27th verse of Genesis, chap. i., that on a certain day, not quite 6000 years ago, "God created man in His own image." This may be regarded as a trial point. It is a fact stated in no other book in the world. It is a fact which Moses could only know by tradition, or by its immediate revelation to him by God. He probably had received some idea of it by tradition; but its explicitness, positiveness, and precise date, we must ascribe to Divine communication. Either way, the question must often occur to us, Is Moses a perfectly reliable historian? Is his narrative entirely true? And here geology comes in. Curious men have been, for almost a century, digging into the crust of the earth in a thousand places. They have discovered, they tell us, that between "the beginning" of Genesis i. 1, and the "first day" of verse 5, there must have elapsed many millions of years. They have disinterred whole races of beings—fish, fowl, and quadruped—which they conclude lived,

passed away, and perished; and were succeeded by other and higher species. Of Geology, therefore, we must ask, What she says to this recent creation of man? and whether her investigations throw doubt upon it, or bring confirmation?

Owen. Yes, I can see that this is really a matter on which Geology ought to speak, and upon which her voice should be heard. What is the testimony that she has given?

White. It is most full, explicit, and conclusive. Geologists tell us that they have penetrated the crust of the earth in some thousands of different places, in various parts of the world. They have discovered and catalogued no fewer than 24,000 different species of creatures, who lived and died in what are termed the Palæozoic, Secondary, and Tertiary periods; but among all these no one has ever met with a single specimen of the human family: not even a portion of a man, not even one clearly-defined human bone, has ever been brought to light. Surely this, to use a modern phrase, is "a great fact."

Owen. Is there not a fossil man in the British Museum?

White. Oh, yes! and of men buried in historic times—old Danes, Romans, Saxons, old Egyptians, or Italians—many have been disinterred. But the question you will see is, What shall we say of the Mosaic narrative? Is it, or is it not true, that man was first created about 5800 years ago? Has a single specimen been found, or even a human bone, of which the geologist could say, "This must have been here for more than 10,000 years?" I repeat that geology answers, "No." The fossil man from Guadalupe is never assigned to the

geologic ages. No geologist ascribes to that fossil any pre-Adamite existence.

Owen. But is this the general verdict of all geologists?

White. Yes. I am not aware of any man of the least eminence amongst them who maintains a different opinion. Here are a few testimonies, which I have copied into my pocket-book, from time to time, as I have met with them:—

Sir Humphry Davy says:—“In none of the geological formations have the remains of man, or any of his works, been discovered; and the comparatively recent existence of man, as the master of the globe, is as certain as the destruction of a former, and a different order of things.”

Sir R. Murchison says:—“Geology reveals to us that, during immeasurable periods, long anterior to the creation of the human race, whole races of animals were successively created, lived their appointed time, and perished” (page 4).

Dr. Buckland says:—“No conclusion is more fully established, than the important fact of the total absence of any vestiges of the human species throughout the entire series of geological formations” (vol. i. p. 101).

Cuvier says:—“The human remains did not exist in the countries in which the fossil bones of animals have been discovered, at the epoch when these bones were covered up” (page 131).

Professor Phillips says:—“Geology, agreeing with the authority of Scripture in the late date of man, and the races of beings associated with him, adds its own testimony of pre-Adamite beings.”*

And Mr. Page tells us,—that “So far as geo-

* *Life on the Earth*, p. 47.

logical evidence goes, we have no traces of man, or his works, till we arrive at the superficial accumulations; the cave deposits and peat mosses of the present period.”*

Owen. Are there no opposite opinions?

White. I have not met with any. But you will observe that it is not so much opinions as facts that are needed. When such men as Sir Humphry Davy and Baron Cuvier assert boldly that no human remains can be found in the geological periods, the only answer to be made to them is, by pointing out such remains, and saying “Here they are.”

Owen. But ought we not to allow for the operations of time in erasing and destroying such proofs of the existence of man in the earlier days of the earth’s existence?

White. Sir Charles Lyell replies, to such a suggestion, that the whole experience of geologists is the other way. “Even,” he says, “if the more solid parts had disappeared, the impression of their form would have remained; as have the traces of the leaves of plants, and the soft integuments of many animals.”† Why, of the Palæozoic period, which all geologists consider to have passed away millions of years ago, we have the remains, in abundance, of multitudes of fishes and reptiles. Is the body or the skeleton of man more perishable and less likely to have been preserved? In fact, of the 24,000 species now existing in our Museums, the greater part must have been of a more fragile character than man. Hence, when we find those creatures, whether fish, or fowl, or quadruped, or

* *Life of the Globe*, p. 214.

† *Principles of Geology*, p. 147.

reptile, in vast abundance, and in all parts of the earth, and can find no fragment, even, of man—not even a bone, or a footprint—is not the conclusion clear, and is it not irresistible?

Owen. It strikes me that I heard, some time ago, that though no human remains had yet been discovered, there had been found, in one or two places, some stone tools, or weapons, which were called “celts,” and which were dug up in a quarry lying far beneath the surface.

White. Yes, at Amiens, in France, and in several places in England, such stones have been found. They are, like meteorolites, and some other strange things, fair subjects for discussion; but it is quite impossible to adduce them as a proof of anything.

Owen. Why so?

White. Because, out of several features which are necessary to constitute a proof, they present only one; and that only in probability, not in certainty.

Owen. Pray explain to me what you mean.

White. I will try to do so. The question, then, is, Did man exist at some earlier date than Moses ascribes to him? Those who wish to destroy the authority of Moses are called upon to show, if they can, the remains of a man among the fishes, reptiles, birds, or mammalia of the Palæozoic, Secondary, or Tertiary periods. They fail to produce the slightest proof of this kind; but latterly they have seized upon these “celts,” or “stone hatchets,” and have assumed them to have been made earlier than the human period. They then argue, “Here are the tools or implements of man; therefore man must have ex-

isted in the geological periods ; though we have never found the least remnant of his remains."

Owen. Well, is not this a fair argument ?

White. It wants strength and sufficiency. First, it assumes that the particular "celts" in question were tools wrought by human hands. This is probable, but not certain. There are many other things found among the stones of the earth, which, to an experienced eye, look like tools or toys upon which the hand of man has been at work ; and yet men of science declare that they are merely natural products. Still, I grant that it seems probable that these "celts" were the workmanship of some savage or uncivilised tribe of men. But when we come to the question of their position, upon which their real antiquity mainly turns, we find nothing but uncertainty. They are not so near the surface as to be ascribed to Roman or to Gaulic times ; they lie deeper than the deposits of the last 2000 years. But how little do we know of what changes passed upon the earth in the 3000 years which elapsed before the time of Solomon ! Who can tell, or even surmise, what earthquakes or deluges may have disturbed the soil of northern France during those thirty centuries ? These remains, supposed to be the handiwork of man, are not found in the Palæozoic or the Secondary formations. No one ascribes to them any greater antiquity than the Tertiary period ; that is, the period immediately preceding the Mosaic creation. Thus, the whole question is narrowed to this : May not these "celts," or stone hatchets, have been of the date of Japheth, or of Japheth's grandchildren ? And may not their entombment under gravel and other deposits have

been the work of a flood, or an earthquake, in the 2300 years which elapsed between the days of Japheth and those of Christ? A man must be prepared to establish two things—namely, that these things were certainly human implements, and that they could not have been buried under twenty feet of gravel in the course of the last 4000 years. He must establish, I say, these two points, very clearly and unanswerably, before he can be entitled to assert that the existence of man before the date described by Moses is even shown to be probable.

Owen. But is not the whole matter hereby left in some doubt? These “celts” may have been pre-Adamite; and if so, then we have arrived at the fact of the existence of the works of man, and therefore of man himself, at an earlier date than that indicated by Moses.

White. No; we are a long way, as yet, from any such conclusion. One of the latest papers on the subject, I believe, was published in a French scientific journal of high repute, early in the present year. It is entitled, *On the Insufficiency of the Arguments drawn from the Position of the Worked Flints at St. Acheul to show the Existence of Man in the pre-Adamite Periods*; and its author was M. Scipion Gras. This gentleman recently paid a visit to the spot, which is apparently the site of an ancient manufactory of flint tools; and came away satisfied that the said manufactory was of the human period. He asks, with great force:—“Why, above all, do we not find human remains in the diluvium? Their absence is the more astonishing, as it is not uncommon to find there the remains of elephants, rhinoceroses, and other animals. If men so civilised as to occupy

themselves with commerce lived on the banks of the Somme at the commencement of the quaternary period, they must have constructed habitations there; and these would be seen now in the masses of diluvium which, at a later period, filled up the valley; they would even be perfectly preserved in it. Now, this deposit has never presented the least vestige of a habitation, nor even of other products of human industry, excepting flint objects. Another consideration strengthens all these grounds of doubt: worked flints, similar to those which are claimed as diluvian, have been found in such a position, that it has been necessary to attribute to them a modern origin. M. Toillez, an archæologist and engineer of Mons, possesses a collection of 400 axes, which, for the most part, are rough, and do not differ sensibly from those of St. Acheul; nevertheless, they have all been collected at the surface of the soil."

He then goes into the question of the position of these flints, and shows that there is nothing to compel us to assign to them any more ancient date than some 3000 or 4000 years ago. Hence the conclusion which he evidently draws is this: That, among the various tribes which sprang from Japheth, one or more found a home in Gaul, and partly, perhaps, in the neighbouring islands of Britain; that, being an industrious race, and destitute of iron, they made tools and weapons out of flint; that in process of time they became so far semi-civilized, that a sort of trade or manufacture of these flint axes sprang up; and that, of late, and especially in France, we have come upon, not single specimens of these stone axes merely, but large collections of them. Their position, however, is not, in M.

Scipion Gras' opinion, that of the pre-Adamite ages. He finds nothing to disprove the natural assumption that, though earlier than Greece or Rome, these flint implements may have been buried since the days of Noah. Consequently we have not even a difficult question to meet. If we had been compelled to admit that these "celts," or flint hatchets, must have lain in the earth these 10,000 years, we should still have fallen back on the obvious and cogent questions, Where, in the pre-Adamite strata, do you find one single fragment, or even one foot-print, of man? And, if he then existed, how can he have so completely vanished? But we are not even driven to urge these obvious difficulties; for it is quite clear that no one has yet proved, or can prove, the existence of one of these "celts" before the time of Adam. That some of the grandchildren of Japheth found their way into various parts of Europe, is quite certain. That they were destitute of iron, and probably knew not how to find it, is also extremely likely. What remains, then, but the plainly reasonable conclusion, that a thousand years before Athens or Rome existed, there dwelt in parts of Gaul, hardy, industrious descendants of Japheth, who made for themselves tools and weapons out of flint; and some of whose workshops, lying not far below the present surface, have recently been laid open? There is nothing more strange or unaccountable in this discovery, than in the discoveries made by the disinterment of Pompeii, or Uriconium. But we must remember that it is most likely that these flint workshops bore date above a dozen centuries before Pompeii, or Uriconium, the newly-discovered city — lying beneath the present town of Wroxeter —

existed; and hence it was to be expected that a thicker deposit of soil should cover them.

Owen. On the whole, then, what is your conclusion?

White. That the grand fact remains untouched, that while Moses declares, in plain terms, that man was created above 5860 years ago, all the researches of geology confirm that statement. Former states or conditions of the earth have been investigated; and men believe that they understand pretty well the succession of the Palaeozoic, Secondary, and Tertiary periods, and the various creatures that lived in those periods; but while hundreds and thousands of men have been engaged in these investigations, the combined testimony of them all establishes, in the most wonderful manner, the grand fact, that it was not until the *present*—that is to say, the human period, that man was seen on this globe. In one word, Geology and the Pentateuch entirely agree in the declaration, that at the beginning of the world *as we now have it*, “God created man.”

DIALOGUE V.

THE END OF THIS DISPENSATION.

Owen. Good morning, White. What is to be our subject this morning?

White. I think it is one which resembles the first on which we touched. I mean, that it concerns certain declarations of God's word, which we receive darkly and blindly, and only because we must. That is to say, when a man has satisfied himself that the Bible is the word of God, he will not allow himself to stumble at any of its "hard sayings." He will remember that he is like a fly crawling over the dome of St. Paul's, and that it would be mere folly if he were to expect to have every question made clear to him in this life. Hence he receives some statements of Scripture simply because he finds them in God's word, and expects that a day will come when he shall understand them more clearly.

Owen. What are the statements to which you are now alluding?

White. I am thinking of certain fearful predictions which are met with towards the close of the Bible; such as, "The day of the Lord will come as a thief in the night; in the which the heavens shall pass away with a great noise, and the elements shall melt with fervent heat; the earth also, and the works that are therein, shall be burned up."

(2 Pet. iii. 10.) How have you been in the habit of reading such passages?

Owen. Why, I must confess, very much in the way you just now described. I have read them in the Bible, and therefore I have submitted to them. I knew that "with God all things are possible," and that therefore it would be foolish to say, "How can these things be?" Yet I own that when I looked at the mighty ocean, or cast my eye over a vast tract of sandy or stony country, I have felt that it was difficult to conceive of such a conflagration.

White. I know that such thoughts will intrude; and therefore the remark is useful, that here, too, geology comes in, and makes it far more easy to believe intelligently these declarations of Scripture, by showing us that, thousands of years ago, such scenes have actually occurred on the surface of this earth.

Owen. Is this so?

White. Surely. Have you already forgotten two or three passages from scientific writers, which I repeated to you in our first or second conversation? For instance, the words of Cuvier: "Life has often been disturbed on this earth by terrible events; calamities which have moved and over-turned the entire crust of the globe." Or those of Lardner: "It pleased the Most High to doom the past world to sudden destruction, by the secondary agency of geological convulsions." To which I might add the testimony of Professor Phillips, who says that the world, in its former period of existence, felt some "epochs of extraordinary disturbance, in which the relations of sea and land were altered by internal convulsions."

Owen. Yes; I remember that you quoted some of these passages; but do they not seem principally to relate to something like our earthquakes?

White. Doubtless, these were convulsions caused by fire, and in which fire played a principal part. Thus, Sir R. Murchison speaks of "convulsions utterly unmeasurable and inexplicable;" which were caused by "vast outpourings of the subterranean fires." Again, he tells us of "outbursts of great volumes of igneous matter from the interior; the extraordinary violence of which is made manifest by clear evidences." And all writers on geology abound in passages on the earth's "cooling down," and in speculations as to the period when it became cool enough to be fit for the habitation of birds, and beasts, and fishes.

Owen. What, then, is your view, on the whole?

White. It is simply this: Geology declares, with a very distinct and unbroken voice, that the crust of the earth presents abundant signs and tokens of a period or periods when fire ruled and raged upon it. Investigators find clear traces of "outbursts of great volumes of igneous matter, from the interior, with extraordinary violence,"—"catastrophes utterly unmeasurable;" with "repeated emissions of volcanic matter from within."* Hugh Miller thus attempts a description of the state of the earth, after one of these convulsions:—

"We may imagine a dark atmosphere of steam and vapour, which, for age after age, conceals the face of the sun, and through which the light of moon or star never penetrates: oceans of water heated to the boiling point; low, half-molten islands; roaring geysers, ever and anon throwing up their

* *Siluria*, p. 523.

jets of boiling fluid, vapour, and thick steam ; and in the dim outskirts of the scene, the red gleam of fire, shot forth from yawning cracks and deep chasms, bearing aloft fragments of molten rock and clouds of ashes.”*

And Sir Charles Lyell, rapidly glancing at the various tokens of suppressed and concealed heat, which he detects in many quarters, comes to the conclusion that, even now, “ it is astonishing that a single day should pass over without a general conflagration.”† Hence, then, surely Dr. Lardner’s view is the just one; that inasmuch as “ the earth is still subject to the same local oscillations as heretofore, and the heavings of the internal fluid have lost none of their terrific energy when we affirm that a moment must arrive, when what we call this present world will be destroyed, we declare no more than all the analogies of the past history confirm.”

Owen. But do you really think that there is any kindred or affinity between the fires and earthquakes of the geological periods, and the fires predicted by St. Peter, St. John, and others of the prophets ?

White. Why should there not be ? Both concern the same thing ; the same globe of earth, air, and water. The prophets tell us, again and again, of a destruction of this earth by fire. We receive their predictions with a mere submission of mind, and suppose that in some way or other these things will come to pass; though we cannot tell how. Here geology comes in, and shows us that such things have been; and that there is, therefore, no great difficulty in believing that such things may again

* Lectures, p. 239.

† Princip. vol. ii. p. 451.

be. Geology tells us, that in its earliest period the whole earth was fluid from intense heat; and that in it no kind of life was found. Next, we learn that as it slowly cooled, some of the lower kinds of life began to appear; and, at long intervals, higher and yet higher; but that these various states, or steps, in the earth's progress, were frequently marked and separated from each other by terrible convulsions: the bursting forth of internal fires, upheaving mountains, and sweeping away every living thing. Well, all this plainly harmonises with prophecy. The tremendous events, which we are assured will end the present chapter of the world's history, are akin to those which have ended former chapters. And thus geology makes it far more easy than formerly to understand, and therefore to believe, the warnings of the prophets. Is not this tolerably clear?

Owen. Yes, I begin to see that our view is considerably enlarged; and that, instead of believing vaguely some strange and awful predictions, we may look back, intelligently, on vast revolutions which have passed, and from thence may calculate the nature and probability of that great elemental convulsion which is yet to come. But here, I see, we must part; and I wish you a peaceful and a happy day.

DIALOGUE VI.

THE NEW HEAVENS AND NEW EARTH.

White. Ah, my friend, here is another Sabbath morning, and here is a reviving, refreshing subject of contemplation for you. It strikes me that we are naturally brought, by our last Sunday's topic, to a thought which is full of comfort. The course of things around us, according to Scripture and according to Geology, is onward and upward. Should not our desire and prayer be, that we may be moving onward and upward also?

Owen. Gladly would I respond to such a thought; but pray explain to me your meaning.

White. Well, my meaning is this—the general tenor of God's Word points us to a course of onward progress, through nearly 6000 years; and it tells us that after a certain crisis, which cannot be far off, this earth will take another upward spring, resembling that which it took in that great week, when, popularly speaking, on Monday morning it was "without form and void," and on Saturday night was clothed with verdure and inhabited, and pronounced to be "very good." So says the Bible, and so says Geology; and hence I reckon this the sixth particular in which Holy Scripture receives testimony from the researches of science.

Owen. I am glad to hear you say so, but you must explain to me what you mean; for I must

confess that this view of geology has never occurred to me.

White. I can easily do so; for my subject is a plain and simple one, and the proofs are at hand. First, let us look at the representations of Scripture. You know that at the opening of man's history, in Genesis, we see the Divine Spirit calling a new and beautiful world out of chaos, and placing Adam and his wife in a garden, where every delight, including constant intercourse with their Heavenly Benefactor, surrounded them. Into this scene of happiness, the Destroyer, the Tempter, the serpent, thrust himself, and was permitted for a time to defile and ruin everything. But, even from the first hour, it was declared that his portion, at last, should be final defeat and punishment. A Deliverer was promised; and after a time that Deliverer was sent. I need not stop to review the whole Gospel history. My object is, to remind you that, by various prophets—David, Isaiah, Ezekiel, Daniel, and others—a complete deliverance of this earth from the great enemy was foretold repeatedly in glowing terms. You will remember in an instant the picture drawn by Isaiah—“Thy sun shall no more go down; neither shall thy moon withdraw thyself: for the Lord shall be thine everlasting light, and the days of thy mourning shall be ended. Thy people also shall be all righteous: they shall inherit the land for ever, the branch of My planting, the work of My hands, that I may be glorified” (ch. ix.) So, also, closes the prophecy of Ezekiel, and that of Daniel, and that of Malachi. And the whole Word of God finishes with a magnificent picture of future blessedness; when we are told, “The tabernacle of God shall

be with men ; and He shall dwell with them, and they shall be His people" (Rev. xxi. 3) ; precisely as Ezekiel, six hundred years before, had described the new Jerusalem ; ending with the words, "The name of the city shall be, THE LORD IS THERE."

Owen. Yes ; I am aware that Scripture is very explicit, and very emphatic and glowing in its descriptions of a future state of blessedness ; and I know, also, that men's minds have latterly inclined to the belief that this blessedness will be granted on this earth, and not in any other place. But what can Geology have to say to these matters ?

White. It lends to these anticipations all the confirmation that it was in its power to give. Dealing only with the past, and having no prophetic voice, it can only speak by way of analogy. But, if it reveals a principle, or a settled plan or course of action, on the part of the Divine Author of all creation, then it does much ; for we may safely deduce an idea of His mind and will from His past actions. And it is from a close observation of these that all the leading geologists gather precisely the same conclusions which prophets have learnt by inspiration. Thus, Sir Roderick Murchison observes, at the close of his great work, that—

"He who, commencing with the earliest visible signs of life, can thenceforward trace a successive rise in the scale of being, until that period is reached when man appeared upon the earth, must acknowledge, in such works, repeated manifestations of the design and superintendence of a Creator."*

Mr. Page proceeds a step further, and adds :—

"Unless science has altogether misinterpreted the past, and the course of creation, as unfolded by

* *Siluria*, p. 530.

geology, is no better than a delusion, the future must transcend the present, as the present transcends that which has gone before it.”*

And Dr. Lardner is still more distinct, arguing that—

“If we judge by those creative laws which have hitherto characterised the operations of God’s power, a new assemblage of organised beings will be called into life, and a new Flora will clothe the earth. Intelligences will preside over the new world, with faculties as much exalted above those with which man is endowed, as the understanding of man himself is above that of the highest creatures of the last or Tertiary age.”† Hence, “after the convulsion which will sweep away man and his works,” there will follow a new period of calm, and a new race of inhabitants, “whose faculties will as much exceed those of man, as man exceeds the ape or baboon of former periods.” This anticipation, you will observe, is quite in accordance with the views of St. Paul, in 1 Cor. xv.

Owen. Yes; but I hardly perceive upon what Dr. Lardner bases this anticipation. Pray explain it to me a little more particularly.

White. As I understand it, the argument runs thus:—Geology finds that, in the primitive or earliest of the rocks, of which the crust of the earth is composed, there are no remains of life of any kind; and most geologists believe that “in the beginning” the body of the globe was “fluid from intense heat;” and unfit, therefore, for the habitation of any of the creatures which are now found upon it. In process of time, however, all geologists

* *Life of the Globe*, p. 288.

† *Lardner’s Geology*, p. 158.

agree that it gradually cooled; and while the melted mass, of which it was chiefly composed, congealed into what we now call granite, other substances also appeared, lying above, or upon the granite; and among these the lowest kinds of organised beings; such as *mollusca* and *radiata*, or limpets and star-fish, began to be found. These increased, and a progress was now visible; each successive stage of the world's existence being an advance on that which preceded it. A few fish appeared, then new varieties, in large numbers. Then birds are found, and a gigantic vegetation, by which our present stores of coal were accumulated. Large reptiles next show themselves; and after many periods of immense length had rolled away, large elephants, deer, tigers, and other beasts, began to abound. But amidst all, as Sir R. Murchison says, "a successive rise in the scale of being may be traced;" and hence, as Mr. Page argues, "unless science has misinterpreted the past, the future must transcend the present; just as the present transcends that which has gone before it."

Owen. And this, you think, confirms the statements and the anticipations of Scripture?

White. Does it not? Read St. Paul's glowing language in 1 Cor. xv. "It," that is, the human body, "is sown in corruption; it is raised in incorruption: it is sown in dishonour; it is raised in glory: it is sown in weakness; it is raised in power: it is sown a natural body; it is raised a spiritual body." "As we have borne the image of the earthly, we shall also bear the image of the heavenly." "The dead shall be raised incorruptible, and we shall be changed." So to the Philippians he writes—"We look for the Saviour,

the Lord Jesus Christ; who shall change our vile body, that it may be fashioned like unto His glorious body; according to the working whereby He is able even to subdue all things unto Himself." (Phil. iii.) Such, also, as I said just now, is the language of Isaiah, of Daniel, of Ezekiel, of Malachi, and of St. John, concerning the future of this earth. All speak of a glorious time, shortly to arrive, when "the righteous shall shine forth as the sun in the kingdom of their Father."

Owen. What is the particular fact, then, in which you consider that geology confirms Scripture in the matter which we have been considering?

White. It is that of progress. Read, as the Bible used to be read by our grandfathers, two ideas, and two only, were commonly gathered—to wit, one earth and one heaven. The world was considered to have been created about 5800 years ago, and its whole history to have been told in the books of Holy Scripture. That history was considered to be closed, in prophecy, by a tremendous fact, which was yet future, when this earth was to be utterly and finally destroyed, and its inhabitants removed to two other scenes in God's creation—named, respectively, heaven and hell. Such, I say, was the idea formerly entertained of man's past, and present, and future. Now, however, these views have been greatly modified and enlarged. The researches of geology have shown us that, between "the beginning" spoken of in the first verse of Genesis, and the chaos spoken of in the second, there must have intervened many periods of immeasurable length, in which the earth underwent mighty revolutions, but which, as not belonging to man's history, were not revealed to Moses, or made

any part of his narrative. Geology also tells us, that the prodigious changes, the burning up with fire, foretold in Scripture, will not be new or unparalleled events, but rather a repetition of immense convulsions, which have rent the earth in past revolutions. It also adds, that in these past revolutions one feature has been always visible—*i.e.* that the change has been one of progress; that each new creation has been of a higher and nobler kind than that which preceded it. Hence geology, on the whole, points us to the conclusion that a fresh convulsion, destroying all visible things, is likely again to occur, as it has often occurred before; while it is equally probable that the new earth which will then be brought forth, and its new inhabitants, will exceed the earth, and the men and women of our time, just as they have exceeded all that went before them.

Owen. And as to the expectations of the last three centuries, that the earth would wholly vanish away, and its inhabitants be removed to some other spot in God's creation, you deem them to have been erroneous?

White. Nay; I only remark, that while geology has been showing us, on the one hand, that this earth has had a long existence, under other circumstances, before the days of Adam,—criticism has been examining the text of Scripture with new care, and has brought many to the conclusion that the language of Isaiah, of Ezekiel, and of St. John, does not point to a future period of blessedness in heaven, or in some other sphere, but on the earth itself. And so the earth's whole history, instead of being limited to the human period only, or from Adam down to the last day of the present dispensation, is

expanded to far larger dimensions. It appears to begin as a mere insensate orb, destitute of spirit, or life of any kind. After a long existence of this kind, life now appears in its lowest forms. Huge convulsions, at intervals of perhaps millions of years, take place, by each of which all existing creatures having life are destroyed; but each such convulsion is followed by long periods of peace, in which higher and higher forms of life are brought forth. After many creations, destructions, and new creations of this kind, the human period arrives, and man, the noblest of all God's works, appears. The analogy of the past seems to coincide exactly with the declarations of God's Word, and to show it to be exceedingly probable, from a view of the past, as well as certain from the declarations of Scripture, that a moment will arrive "when the earth and all that is therein will be burnt up;" and that after this tremendous event, "new heavens and a new earth will appear, wherein righteousness will dwell."

DIALOGUE VII.

CREATION A FACT AND A MIRACLE.

Owen. Good morning. Have you any other of your thoughts on creation and on geology which may usefully occupy our time to-day?

White. Yes ; there is one other idea which I should be sorry to omit. Perhaps you will hardly understand me when I say that geology seems to me to furnish a conclusive refutation of certain objections which have lately been started with reference to the miracles of Holy Scripture.

Owen. No, certainly, this thought never occurred to me ; neither can I, at first sight, understand what you mean.

White. Well, I will try to explain it to you. I think you must have remarked that the strange and startling ideas which have been mooted in the course of the last few years, all, in point of fact, have their root in atheism. It is, however, a covert and disguised atheism. Its disciples avoid shocking men's common sense by looking abroad upon the glorious sun or the starry heavens, and exclaiming, "These all made themselves, or came into existence by accident ;" they are willing to admit that in the far-distant "Beginning" some Divine Mind, some Universal Father, may have put this vast machine in motion, and may have imposed an immutable law upon it ; but, having made this admission, they are resolved to go no

further. They are firm in the belief that here the great Author stopped; that having set the universe in motion, and imposed a law upon it, He henceforward took no further part in its government. Hence, the God of the Bible—the God who is “about our path, and about our bed, and spieth out all our ways,” they cannot bear to hear of. A dominion of unchanging, universal law, is their theory; and as the thought of any departure from its regularity of movement is hateful to them, so they want not, they see no use for, an ever-present God. The idea of a miracle they declare to be intrinsically absurd; and, like Hume, they hold that no amount of testimony could possibly establish such a fact. Such is the theory which has latterly been revived in some quarters. I say revived, for it is nothing else than the system of Epicurus under new phraseology; and this system, I repeat, geology utterly demolishes.

Owen. How so? You must excuse me, but I do not yet understand you.

White. I will explain the matter as I go. A miracle, these philosophers tell us, is intrinsically impossible. We point to the first chapter of Genesis, and say, “There was a week of miracles;” and, very naturally, they reject the narrative of Moses, treat it as an old Hebrew tradition or fable, and set up schemes of “development” in its room. According to them, all things began in germs or molecules. Life, they think, can be produced by certain chemical combinations—a principle of gradual growth or development is impressed upon all things. Such is the theory advocated in two or three works of some notoriety, which have been published in the course of the last twenty years.

Now, this whole scheme is utterly broken up and destroyed by the discoveries of geology.

Owen. Pray explain to me how.

White. Why, as I have said, creation is essentially a miracle, and hence these philosophers abhor the idea of creation. But no man can investigate the earth's history, as exhibited in its crust or external structure, without meeting with "creation" at every step. So argues Sir R. Murchison, who declares that "Geology reveals to us, that during immeasurable periods, long anterior to the creation of the human race, whole races of animals were successively *created*, lived their appointed time, and perished."* And again: "He who, commencing with the earliest visible signs of life, can thenceforward trace a successive rise in the scale of being, until the period when man appeared on the earth, must acknowledge in such works repeated manifestations of the design and superintendence of a Creator" (p. 530). Therewith agrees Professor Agassiz, who says, "For my part, I am convinced that species have been created successively, at different epochs." But the whole history of this earth is most vividly sketched in a few sentences by Hugh Miller, in one of his finest passages, which I always keep in my pocket-book. Here it is:—

"Nature lay dead in a waste theatre of rock, vapour, and sea, in which the insensate laws, mechanical, chemical, and electric, carried on their blind, unintelligent processes. The creative fiat went forth, and amid waters that straightway teemed with life in its lower forms, vegetable and animal, the dynasty of the fish was introduced.

* *Siluria*, p. 4.

Ages passed, during which there took place no further elevation, when the fiat again went forth, and, through an act of creation, the dynasty of the reptile began. Again ages passed by, marked, apparently, by the introduction of a warm-blooded animal—the bird; when, again, the creative fiat went forth, and the dynasty of the quadruped appeared. Once more, after the lapse of ages, an act of creation took place, and, with the appearance of man upon the earth, the moral government of God in this world took beginning.”*

Owen. Yes, that is all very fine; but is it any more than a vivid picture drawn by a fervid imagination?

White. That is the whole question. I say that Hugh Miller’s description is a description of known geological facts; and I charge it upon the promulgators of the development theory that, while professing to be rational philosophers, they do, in reality, rear up, or try to rear up, a system of belief on no facts whatever. Take, for instance, any of the great revelations of geology—the huge mammoth, or the vast mastodon. We come to these enormous creatures in the geological strata suddenly, and without any preparation whatever. How came they there?

Owen. I think that one of the essayists says something about “the grand principle of the self-evolving powers of Nature,” and of “the origination of new species by natural causes.”

White. Yes, I know he does; and that is just the idea which is utterly annihilated by geology.

Owen. How so?

White. Simply by proof positive that the fact

* *Footprints*, p. 294.

is otherwise. The theory of development is that, beginning with the earliest and lowest forms, such as limpets and star-fish, "the self-evolving powers of Nature" gradually produced new, and newer, and nobler forms, so that the little reptile advanced into the rank of a monkey, the monkey into a larger ape, and the ape into a man. Now, this is all mere theory, based upon nothing more than an ascertained improvement in a few cases. It is as if a gardener, finding that he could by cultivation grow finer roses and heart's-ease than he had ever had before, should, therefrom, deduce the conclusion that a rose was only a daisy largely developed. But let us turn to geology. There we have a vast magazine of facts. We find, as I have said, the mammoth, or the mastodon. Specimens of these, whole skeletons, or large portions, have been found in a great number of places. They all bear the same likeness to each other that a number of specimens of the ox or the horse would among ourselves. Now, an advocate of the development theory, denying that the mammoth was created, asserts that the creature grew, by a hundred successive steps, out of the molluses of the early Palæozoic period. We need not stop to dwell upon the absurdity of this theory; we come at once to the question, What is the testimony of fact? Had such a change ever occurred, must not the evidence of it exist? Among the 24,000 different fossils already catalogued, must there not have been some specimens showing the incipient mammoth? Nay, as the mammoth is one, while the steps between the mollusc and the mammoth must be many, ought we not to find twenty specimens of the developing mammoth for one of the matured animal?

Owen. Yes ; I should think so.

White. Well, then, what is to be said when, against a great number of mammoths in their complete form, there is not a single developing mammoth to be placed ? Each of these creatures, standing alone, is a witness to the fact of creation. Geology tells us, with unhesitating voice, that for millions of years in its Palæozoic period there was no mammoth ; that for millions of years in its Secondary period there was no mammoth ; but that in the Tertiary period multitudes of mammoths suddenly appeared. The inference is obvious—“ The hand of the Creator has been at work.” “ No,” say some, who dislike the idea of creation : “ these creatures were merely developed.” To which we reply, “ Show us some proof of this ; for, without it, your supposition is simply absurd. Just as easily may we give credit to the dreamy legends of the Hindoo or the Chinese, as receive the surmise of a would-be philosopher without an atom of proof. If, for tens of thousands of years, inferior animals were constantly developing into higher kinds, there must have been specimens and examples of this change among the myriads of fossils which everywhere abound. Their non-appearance is a proof of their non-existence. Your theory is submitted to the test of fact, and it is *disproved*.”

Owen. You think it clear and certain, then, that if these great quadrupeds were gradually formed by enlargements and improvements of inferior creatures, some evidence, some specimens of these animals in the course of “ development,” must exist ?

White. I leave it to you. Is it not a dictate of common sense ? The fact, be it observed, is as

certain as any one fact in geology can be, that during the whole of the Palæozoic and Secondary periods, embracing millions of years, no such creature as a mammoth can be found. Yet other creatures, fish and reptiles, are met with by thousands. We pass on to the Tertiary period, the period preceding the present; and now we find huge quadrupeds in multitudes. How came they there? We reply, By the same Almighty fiat which produced fish when there were none, and life itself, where no life had existed before. "These creatures," says Professor Sedgwick, "have no zoological base to rest upon. They were not called into being by any known law of Nature, but by a power above Nature; they were created." The like argument applies, in turn, to all the other classes; to birds, to reptiles, and to fishes. "How were birds called into being?" We reply, "They were created." We are met by a supposition that these great quadrupeds had grown by development, or improvement, out of the fish or reptiles of the earlier periods. We reply, by calling for proof. Just as all geologists agree that man did not exist until the present or human period; because they have investigated the earth's crust in thousands of places, and have discovered tens of thousands of pre-Adamite creatures, but have never met with the slightest trace of man; so we say that development is a dream, a mere fiction of some foolish atheist: inasmuch as, if such a thing had ever been, some traces of it must have remained. No such fact can be discovered; and hence we say that no such fact ever was. To use the words of Professor Sedgwick, "Geology, taken as a plain succession of monuments and facts, offers one firm, cumulative

argument against the hypothesis of development.”*

Owen. Well; but supposing all this to be admitted, how does it bear on the question of miracles?

White. Most palpably, and most unanswerably. A philosopher, of course, will not look upon the earth with reference only to the present or human period. He looks upon it as having existed for millions of years. Well, the question is, whether, on being first dismissed from its Maker's hands, it was left to the government of the laws of Nature alone, or whether its Author has sometimes interposed and overruled those laws by interpositions which we call miracles? Those who dislike this idea object to the notion of creation, just as much as they do to that of a miracle; for, in fact, they have discernment enough to see that creation is a miracle. To call a mammoth suddenly into existence, is as great an interference with “the laws of Nature,” as to call a dead man out of the grave. Hence, to admit the fact of the successive creation of the lower creatures, then of the higher, and then of man himself, renders it irrational for a man, after this admission, to question such facts as the incarnation, resurrection, or ascension; and thus geology, while it rejects and overthrows the fiction of development, establishes the fact of creation; and creation is nothing else than the first and greatest of miracles.

Owen. Yes, I see what you mean now; and I do not think that the possibility of miracles can be questioned, except the questioner has first denied creation, and so has practically denied the very existence of a God.

* Edinburgh Review, No. clxv. p. 62.

White. Why, as I have said, atheism, or a denial of the existence of a God, is the real foundation of the development-theory. I know, indeed, that they will shrink from this charge, and assert that they admit a First Cause, and are willing to concede that, millions of years ago, the laws of Nature emanated from some Divine mind; but this First Cause is the only Deity that they will allow to exist. A God actually ruling over the world which He had made, and creating or calling forth new ones, is an idea which they receive with evident disgust; and therefore it is that I attach so much value and importance to the fact that geology shows us creation in its several stages, and exhibits that very power in operation, which our atheists so evidently dislike and so earnestly deny.

Owen. Yes; I have always felt that there was something strange, unproved, and unprovable, in the development-theory. Did it never strike you that there was a character of absurdity imprinted on its very face?

White. Absurdity! it is more than that. It is a standing proof of the truth of the Psalmist's saying, that it is only "the fool" that "says in his heart, There is no God." Think of a man being so resolved not to believe in creation, because he hates the idea of an active, ever-present God; that, to avoid this, "we are called on to believe that geese may hatch rats, that cassowaries may hatch kangaroos, that seals may breed into lions and whales into elephants; and that monkeys, through good-breeding, may become men!" Amidst the voluminous chronicles of human folly, there is, I think, no single case of fatuity which surpasses this.

DIALOGUE VIII.

CONCLUSION.

White. Good morning, friend Owen. I think we may conclude that subject this morning on which we have been lately conversing.

Owen. You have no more proof, then, to bring from the investigations of geology, for the establishment of the truth of Scripture?

White. I can hardly say that; but I think that enough has been done. In some cases five or six witnesses are as good as a score. If you and four or five other credible persons told me that you had seen a meteor last night, I should not want the evidence of a dozen more persons to convince me of the fact.

Owen. Well, at least, you consider that sufficient has been said. Will you, then, go rapidly over our past conversations, and let us see what is the real amount of proof which they have furnished?

White. Very willingly. I have regarded Geology, not as some do, as an enemy, but as a credible and an important witness. I am certain that the works of God, if fairly investigated, can never contradict His word. God is "of one mind," and "He cannot deny Himself." Hence I feel satisfied, that if the testimony of geology be fairly given and fairly received, it must agree with, and not contravene, the plain statements of Holy Scripture.

Owen. You had better consider, then, Geology

as a witness, and deal with its testimony after that manner. Let us review the whole question from that point of view.

White. Willingly. I open the Book of Genesis, then, and I ask Geology what is the interpretation to be put upon verse 1, "In the beginning?" It is quite clear that Moses gives us no clue to the date of this "beginning." It may have been just before Adam's creation, or it may have been many millions of years before that date. Neither view contravenes anything that Moses has said. The reply of Geology is, that, judging from the appearance of the various strata of the earth, and considering how many thousands of years would be occupied in the formation of a thousand feet in thickness of chalk; how many hundreds of thousands of years would be required for the vast coal formations; and then, looking at the length of time required for the oolite, the sandstone, and the granite, it is impossible to doubt that the earth must have been millions of years in arriving at its present state and condition. Well, I consider all this, and I remark that it is vastly more consonant with the plain sense of many passages of Scripture than our limited view of an existence of less than six thousand years. We are accustomed to ask, Why was the coming of the Messiah delayed for four thousand years? Why is Christ's return so long delayed? How can this delay be reconciled with His promise of "coming quickly?" These questions all spring from the same error of using a wrong standard of time. If we really believed the Psalmist's words, "A thousand years are in thy sight as yesterday, and as a watch in the night,"—if we listened to St. Peter's exhortation, and felt satisfied that a

thousand years are in God's view as one day,—we should no longer say, "My Lord delayeth His coming." Thus it helps us to believe and know the truth, to be assured that this earth of ours has already passed through a history of many millions of years; so that the days from Adam downwards have been merely a very brief episode of the whole story. If a friend says, "I will see you again soon," we are not surprised if he remains absent for two or three days. Realise the truth, that 2000 or 3000 years are with God as two or three days are with us; ponder upon the fact, that even this earth itself has rolled on its axis many thousand times a thousand years; and then all the language of Scripture is simple, and true, and quite exact. So far, Geology confirms Scripture, instead of being at variance with it.

Next, I will ask Geology at what conclusion the searchers into the earth's formation have arrived, as to the circumstances attending the incoming of the present or human period. And the answer is, that the different stages or periods in the past life of the globe seem to have been divided from each other by vast convulsions, mighty earthquakes, attended by the outburst of internal fires; and that the last of these great revolutions appears to have occurred about six or seven thousand years ago. That convulsion left the earth "the wreck and ruins of a former world." All kinds of life had been extinguished; and the outbreak of subterranean fires must have turned oceans into masses of vapour, and so have wrapped the world in darkness. In a word, Geology describes the beginning of the human period precisely as Moses describes it when he says, "The earth was without form, and

void ; and darkness was upon the face of the deep."

Thirdly, I call upon this witness to say what light has been thrown upon the question of the beginning of our measure of time at the beginning of the present period. If the earth existed long before man existed on it, did it know, in those old times, the same nights and days, the same times and seasons, which we know ? The answer of Geology is decidedly in the negative. The researches of geologists have satisfied them that the climate of the pre-Adamite world was wholly unlike that of our own period. The regions now frozen were then warm. One inquirer asks whether astronomical reasons can be assigned for this remarkable change. Another suggests that the axis of the earth must have suffered some change. But the fact is universally agreed upon, that the climate of the old world differed greatly from that which we now experience. Here, then, is another confirmation of Scripture ; for Moses tells us, that in the course of a certain week, not quite 6000 years ago, our present days and nights, our times and seasons, our winters and summers, all had beginning. And Geology agrees with this so far as to be quite certain that the human period, which began about 6000 years ago, has a different climate, a different cold and heat, probably a different day and night, from the pre-Adamite ages.

A fourth question which I put to Geology is this :—Distinguishing the different periods called Geological,—the Azoic, the Palæozoic, the Secondary, and the Tertiary,—in which of them does man appear ? The answer is clear and positive : In none of them. Not a fragment of a human form

or skeleton can be found in all those millions of years. It is man's appearance, after all the geological ages have passed away, which gives to the present the name of "the Human period." Our museums are filled with vast varieties of creatures who lived in the Palæozoic age, perhaps two, three, or ten millions of years ago. Then with other and different creatures, who lived at a more recent date, but still probably more than a million of years ago. Then with a third race of beings, who lived in the days preceding the last great convulsion, but still many thousands of years before a man was seen. In none of all these millions of years, so far as Geology can learn, did man exist. His entrance upon this earth, so far as geological investigations can decide the question, was at the commencement of the present period—the period in which we are now living. And thus, in the chief fact of all—the beginning of the human race, Geology and the Bible are entirely agreed. When Moses says, that in the first week of the world's present history "God created man," Geology responds that this assertion is fully in accordance with all the investigations of science up to the present moment.

A fifth and a sixth question are closely connected with each other. What says Geology of the probable future? It replies, that judging by the past, and observing that many successive periods or stages of the earth's existence have been suddenly closed by vast convulsions, in which the outburst of internal fires has generally been a principal agent, it inclines to the opinion that another revolution of the same kind may be in store. But it observes, also, that each of these convulsions, in

the ages that are past, has been followed, apparently, by a long period of calm, and by a constant progress—an advance from a lower to a higher kind of life, until the latest, the human period, gave the earth a ruler, made in the likeness of God, and having a rational soul. And hence geologists agree that, gathering from the past the law of the earth's existence, they trust, that if again convulsed, as in past times, by a new and destructive revolution, that revolution will bring in, like the former ones, a fresh advance in the scale of being—a nobler kind of life than it has yet known.

And here, too, Geology again, and most fully, agrees with the Bible. All readers of God's word will recal to mind, without difficulty, many passages of Scripture which entirely agree with both these anticipations. Prophets and apostles, from the beginning of the Bible to the end of it, have constantly told us of a coming destruction, of a fiery visitation, of a burning up of the earth. But they have not ended with this. They have gone on to predict, as geologists now do, the rise of "a new heaven and a new earth," like a phoenix from the ashes of the old. Again, therefore, the agreement is full and complete. Geology confirms the declarations of Scripture.

Once more, I inquire of Geology respecting another matter on which new doubts have recently been thrown, or rather, on which old doubts have been revived. We have lately been assured, with a vast assumption of scientific authority, that the idea of a miracle is intrinsically absurd; for that the laws of existence, or the laws of Nature, are unchangeable, and cannot be broken. I demand, therefore, of Geology, what evidence or what con-

viction it has arrived at, with reference to such a subject as this.

And the reply is distinct, full, and conclusive. Geology declares, with unhesitating decision, that any one who chooses to dig into the crust of the earth may find miracles in abundance. He will find in the upper, or recent formations, the remains of human beings deposited during the last six thousand years. He will find no such remains during the geological periods. Hence the assertion of Moses is confirmed, that on a certain day, about 5860 years ago, "God created man." In the like manner, in the Tertiary formations, huge beasts are found—the mastodon, the mammoth, &c. In the Secondary, no such creatures existed. They appeared in the succeeding age by creation. So of birds, of reptiles, and of fishes. Each came in its turn by creation. And to call a bird, or an elephant, or a man, into existence where none was ever seen before, is a miracle, as great and as unquestionable as the calling Lazarus out of his grave, or the giving sight to the blind. Miracles, therefore, are attested by geology as facts which have been ascertained, seen, felt, and handled.

Owen. You draw from geology, then, as many as six or seven attestations of the statements of Scripture. First, the real brevity of a mere thousand years, and the truth of the longer measures of time which are common in the Bible; then the correctness of Moses' description of the state of chaos which preceded "the first day;" then the fact that there really was a "first day"—a first of the days now known to us—about 6000 years ago; fourthly, that man was placed upon the earth just at the time and in the manner which

Moses describes ; next, that there is an evident probability of a destruction of this earth by fire, and of the rise of a new heaven and earth, as foretold by all the prophets ; and lastly, that the successive creations of different races, and of man himself in the latest, is a fact "written on the rocks for ever," a fact which brings miracles within our sight and touch.

White. Yes ; you have accurately stated the case. And may I not ask, whether, when men began with pick-axe and lever to break up the earth's crust, it could ever have been expected that from such researches so many proofs of the truth of the statements of Moses could ever have been found ? That nothing destructive of our belief in the Hebrew historian would appear, might be a rational expectation ; but we had, I suppose, no previous right to expect that positive confirmations would be found. And hence the wondering admiration which I expressed when we first spoke on these topics, that Geology should have been made to yield such an unlooked-for evidence of the truth of the Mosaic narrative. I find in it one more proof that, search where we will, we are sure to meet with the works and the power of God. "If I climb up into heaven, thou art there : if I go down into hell, thou art there also. If I take the wings of the morning, and remain in the uttermost parts of the sea ; even there also shall thy hand lead me, and thy right hand shall hold me." (Ps. cxxxix.) The simple truth is, that the same Lord Jesus who said in the days of his flesh, "Before Abraham was, I am," said also, by the mouth of Solomon, "When He prepared the heavens, I was there : when He set a compass upon the face of the deep . . . while as

yet He had not made the earth, nor the fields, nor the highest part of the dust of the world. . . . when He established the clouds above : when He strengthened the fountains of the deep : when He gave to the sea his decree : when He appointed the foundations of the earth, then I was by Him." (Prov. viii.) The Creator of heaven and earth, the Triune Jehovah, who said, "Let us make man in our image," was also the teacher of Moses, as He was of Job and of Solomon ; and He could not err, nor would He mislead those whom He graciously guided and inspired. He enabled Moses to describe the creation of man and of man's earth accurately ; and the more closely the subject is investigated, the more clearly will it be manifested that the account of that creation given at the opening of the book of Genesis is a simple and true account, dictated by Him who wrought all the works which He therein describes. And so of the whole Bible. In Genesis, in the Book of Job, in the Psalms, in the Proverbs, and in several of the Prophets, we have glimpses of creation, and of the laws which God has imprinted on His various works; and among all those sketches and outlines we shall search in vain for a single error. It is this which distinguishes the Bible from all other ancient books of philosophy. If we take up the cosmogonies of the Greeks or of the Egyptians, of the Chaldeans, the Phœnicians, or the Chinese, we find at every step the most revolting absurdities. There is not one among them all, to which even a child would give a moment's credence. And this is natural enough, for the writers were all mere men, speculating in the dark, on matters which had happened 2000 or 3000 years before. But in the Bible we find ourselves

in a different region. There are no formal lessons — no lectures upon science, for the book was written with a totally different view. But in a hundred places, the earth and its origin, the sun, moon, and stars, are spoken of, and always accurately. It is throughout “the language of a Father, addressing himself even to the youngest of his children, but in such a manner that even the eldest of them will never find a sentence contrary to the truth ;” and who, while he is thinking and speaking chiefly of spiritual things, “drops expressions which show them that what they have learned of his works during four thousand years, he knew long before, and much better than they.” This has often been shown in astronomical and in other kindred matters, but I think that it is nowhere more apparent than in the chief facts of Geology.

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